

MAQTQGTRRKVCYYYDGDVGNYYYGQGHPMKPHRIRMTHNLLN
YGLYRKMEIYRPHKANAEEMTKYHSDDYIKFLRSIRPDNMSEYSKQMQRFNVEDCPV
FDGLFEFCQLSTGGSVASAVKLNKQOTDIAVNWAGGLHHAKKSEASGFCYVNDIVLAI
LELLKYHQRVLYIDIDIHHGDGVEEAFYTTDRVMTVSFHKYGEYFPGTGDLRDIGAGK
GKYYAVNYPLRDGIDDESIEAIFKPVMSKVMEMFQPSAVVLQCGSDSLSGDRLGCFNL
TIKGHAKCVEFVKSENLPMMLGSGGYTIRNVARCWYETAVALDTEIPNELPYNDYF
EYFGPDFKLHISPSNMTNQNTNEYLEKIKQRLFENLRMLPHAPGVQMQAIPEDAIPEE
SGDEDEDDPDKRISICSSDKRIACEEEFSDSEEEGEGGRKNSSNFKKAKRVKTEDEKE
KDPEEKKEVTEEBEKTKEEKPEAKGVKEEVKLA (SEQ ID NO:1)

FIGURE 1A

1 atgtctgggg tctctgcccg ctgggtgctgc tgtctcccac tcgggtcatcc ttagaacaca
61 gcctgagcgt ctctgtcact cggggtagac cacgcgggga ggcgagcaag atggcgcaga
121 cgcagggcac ccggaggaaa gtctgttact actacgacgg ggatgttggg aattactatt
181 atggacaagg ccaccaaatg aagcctcacc gaatccgcat gactcataat ttgctgctca
241 actatgggtct ctaccgaaaa atggaaatct atcgccctca caaagccaat gctgaggaga
301 tgaccaagt2 ccacagcgat gactacatta aattcttgcg ctccatccgt ccagataaca
361 tgtcggagta cagcaagcag atgcagagat tcaacgttgg tgaggactgt ccagtattcg
421 atggcctgtt tgagtctctgt cagtgtctta ctgggtggttc tgtggcaagt gctgtgaaac
481 ttaataagca gcagacggac atcgctgtga attgggctgg gggcctgcac catgcaaaga
541 agtccgaggg atctggcctc tgttacgtca atgatatcgt cttggccatc ctggaactgc
601 taaagtatca ccagaggggtg ctgtacattg acattgatat tcaccatggg gacggcgttg
661 aagaggcctt ctacaccacg gaccgggtca tgactgtgtc ctttcataag tatggagagt
721 acttcccagg aactggggac ctacgggata tcggggctlg caaaggcaag tattatgctg
781 ttaactaccc gctccgagac gggattgatg acgagtccta tgaggccatt tccaagccgg
841 tcatgtccaa agtaatggag atgttccagc ctagtgcggg ggtcttacag tgtggctcag
901 actccctatc tggggatcgg ttagggttgc tcaatctaac tatcaaaggc cacgccaagt
961 gtgtggaatt tgtcaagagc tttaacctgc ctatgctgat gctgggaggc ggtggttaca
1021 ccattcgtaa cgttgcccgg tgcctggacat atgagacagc tgtggccctg gatacggaga
1081 tccctaataga gcttccatac aatgactact ttgaatactt tggaccagat tccaagctcc
1141 acatcagtcc ttccaatatg actaaccaga acacgaatga gtacctggag aagatcaaac
1201 agcgactgtt tgagaacctt agaatgctgc cgcacgcacc tggggctcaa atgcaggcga
1261 ttccctgagga cggcatccct gaggagagtg gcgatgagga cgaagacgac cctgacaagc
1321 gcattctcgat ctgctcctct gacaaacgaa ttgctctgtg ggaagagttc tccgattctg
1381 aagaggaggg agaggggggc cgcaagaact ctccaactt caaaaaagcc aagagagtca
1441 aaacagagga tgaaaaagag aaagacccag aggagagagaa agaagtcacc gaagaggaga
1501 aaaccaagga ggagaagcca gaagccaaag ggtcaagga ggaggtcaag ttggcctgaa
1561 tggacctctc cagctctggc ttccctgctga stccctcacg tttctttccc c (SEQ ID NO:2)

FIGURE 1B

1 cgccgagctt tcggcacctc tgcgggggtgg taccgagcct tcccggcgcc ccttcctctc
 61 ctcccaccgg cctgcccctc cccgcgggac tatcgccccc acgtttccct cagccctttt
 121 ctctcccggc cgagcccgcg cggcagcagc agcagcagca gcagcaggag gaggagcccg
 181 gtggcgggcg tggccgggga gcccatggcg tacagtcaag gaggcgsgaa aaaaaaagtc
 241 tgcctactact acgacgggtga tattggaaat tattattatg gacaggggtca tcccatgaag
 301 cctcatagaa tccgcatgac ccataacttg ctgttaaatt atggcttata cagaaaaatg
 361 gaaatatata ggccccataa agccactgcc gaagaaatga caaaatatca cagtgatgag
 421 tatatcaaat ttctacgggt aataagacca gataacatgt ctgagtatag taagcagatg
 481 catatatatta atgttggaga agattgtcca gcgtttgatg gactctttga gttttgtcag
 541 ctctcaactg gcggttcagt tgcctggagct gtgaagttaa accgacaaca gactgatatg
 601 gctgttaatt gggctggagg attacatcat gctaagaaat acgaagcatc aggattctgt
 661 tacgttaatt atattgtgct tgcctacctt gaattactaa agtatcatca gagagtccta
 721 tatattgata tagatattca tcatgggtgat ggtgttgaag aagcttttta tacaacagat
 781 cgtgtaatat cgggtatcatt ccataaatat ggggaatact ttcctggcac aggagacttg
 841 agggatattg gtgctggaaa aggcaaatac tatgctgtca attttccaat gtgtgatggg
 901 atagatgatg agtcatatgg gcagatattt aagcctatta tctcaaagggt gatggagatg
 961 tatcaacctc gtgctgtggg attacagtgt ggtgcagact cattatctgg tgatagactg
 1021 ggttgtttca atctaacagt caaagggtcat gctaaatgtg tagaagttgt aaaaactttt
 1081 aacttaccat tactgatgct tggaggagggt ggctacacaa tccgtaaatgt tgctcgatgt
 1141 tggacatatg agactgcagt tgcctctgat tgtgagattc ccaatgagtt gccatataat
 1201 gattactttg agtatcttgg accagacttc aaactgcata ttagtccttc aaacatgaca
 1261 aaccagaaca ctccagaata tatggaaaag ataaaacagc gtttgtttga aaatttgcgc
 1321 atgttacctc atgcacctgg tgtccagatg caagctatcc cagaagatgc tgttcatgaa
 1381 gacagtggag atgaagatgg agaagatcca gacaagagaa tttctattcg agcatcagac
 1441 aagcggatag cttgtgatga agaattctca gattctgagg atgaaggaga aggaggtcga
 1501 agaaatgtgg ctgatcataa gaaaggagca aagaaagcta gaattgaaga agataagaaa
 1561 gaaacagagg acaaaaaaac agacgttaag gaagaagata aatccaaggc caacagtggg
 1621 gaaaaaacag ataccaaaag aaccaaatca gaacagctca gcaaccctg aatttgacag
 1681 tctaccaaat ttcagaaaat cattaaaaag aaaatattga aaggaaatg ttttctttt
 1741 gaagacttct ggcttcatct tatactactt tggcatggac tctatttatt ttcaaattggg
 1801 actttttcgt ttttgccttt ctgggcaagc tttattgtga gattttctaa ttatgaagca
 1861 aaattttctt tctccaccat gctttatgtg atagtattta aaattgatgt gagtcattat
 1921 gtcaaaaaaa ctgatctatt aaagaagtaa ttggcctttc tgagctgaaa aaaaaaazaa
 1991 aaaag (SEQ ID NO:4)

FIGURE 2B

MAKTVAYFYDPDVGNFHYGAGHPMKPHRLALTHSLVLHYGLYKK
MIVFKPYQASQHDMCRFHSEDIYIDFLQRVSPTNMQGFTKSLNAFNVGDDCPVFPGLFE
FCSRYTGASLQGATQLNNKICDIAINWAGGLHHAKKFEASGFCYVNDIVIGILELLKY
HPRVLYIDIDIHHGDGVQEA FYLTDRVMTVSFHKYGN YFFPGTGDMYEVGAESGRYYC
LNVPLRDGIDDQSYKHLFQPVINQVVDFYQPTCIVLQCGADSLGCDRLGCFNLSIRGH
GECVEYVKSFNIPLLVLGGGGYTVRNVARCWTYETSLLVEEAISEELPYSEYFEYFAP
DFTLHPDVSTRIENQNSRQYLDQIRQTIFENLKMLNHAPSVQIHDVPADLLTYDRTDE
ADAEERGPEENYSRPEAPNEFYDGDNDNDKESDVEI (SEQ ID NO:5)

FIGURE 3A

1 ggaatttcgcg gccgcggcgg gcgcggggagg tgcgggggcct gctcccgcgc gcaccatggc
 61 caagaccgtg gccatattct acgaccccgga cgtggggcaac ttccactacg gagctggaca
 121 ccctatgaag ccccatcgcc tggcattgac ccatagcctg gtccctgcatt acggtctcta
 181 taagaagatg atcgtcttca agccatacca ggcctcccaa catgacatgt gccgcttcca
 241 ctccgaggac tacattgact tcctgcagag agtcagcccc accaatatgc aaggcttcac
 301 caagagtcct aatgccttca acgtaggcga tgactgcccc gtgtttcccg ggctcttga
 361 gttctgctcg cgttacacag gcgcattctct gcaaggagca acccagctga acaacaagat
 421 ctgtgataat gccattactt gggctgggtgg tctgcaccat gccagaagt ttgaggcctc
 481 tggcttctgc tatgtcaacg acattgtgat tggcatcctg gagctgctca agtaccaccc
 541 tcgggtgctc tacattgaca ttgacatcca ccatgggtgac ggggttcaag aagctttcta
 601 cctcactgac cgggtcatga cgggtgtcct ccacaaatac ggaaattact tcttccctgg
 661 cacaggtgac atgtatgaag tcggggcaga gagtggccgc tactactgtc tgaacgtgcc
 721 cctgcgggat ggcattgatg accagagtta caagcacctt tccagcccg ttatcaacca
 781 ggtagtggac ttctaccaac ccacgtgcat tgtgtccag tgtggagctg actctctggg
 841 ctgtgacga ttgggtgct ttaacctcag catccgaggg catggggagt gcgttgaata
 901 tgtcaagagc ttcaatatcc ctctactcgt gctgggtggg ggtgggtata ctgtccgaaa
 961 tgttgccgc tgctggacat atgagacatc gctgtgtgta gaagaggcca ttagttagga
 1021 gcttccctat agtgaatact tcgagtactt tgccccagac ttccacttc atccagatgt
 1081 cagcaccgc atcgagaatc agaactcacg ccagtatctg gaccagatcc gccagacaat
 1141 ctttgaaaac ctgaagatgc tgaaccatgc acctagtgtc cagattcatg agtgcctgc
 1201 agacctcctg acctatgaca ggactgatga ggctgatgca gaggagaggg gtcctgagga
 1261 gaactatagc aggccagagg cacccaatga gtctctatgat ggagaccatg acaatgacaa
 1321 ggaaagcgat gtggagattt aagagtggct tgggatgctg tgtcccaagg zatttctttt
 1381 cacctcttgg aagggtctga gggaaaagga gtggctccta gagtccctggg ggtcacccca
 1441 ggggtcttgg ctgactctgg gaaagagtct ggagaccaca tttgggtctc gaaccatcta
 1501 cctgctcttc ctctctctcc caaggactga caatggtacc tattagggat gagatacaga
 1561 caaggatagc tatctgggac attattggca gtggggccctg gaggcagtcc ctagccccc
 1621 ttgcccccta tttcttccct gcttccctcg aaccagaga tttttgaggg atgaacgggt
 1681 agacaaggac tgagattgcc tctgacttcc tctccctcg ggtccctgac tcttctctcc
 1741 ccttgcttcc agggaaagatg aagagagaga gatttggag gggctctggt tccctaacac
 1801 ctgaatccca gatgatggga agtatgtttt caagtgtggg gaggcattga aatgttctg
 1861 ttctcacttt tggcttcatg tccattttac cactgttttt atccaataaa ctaagtcggg
 1921 attttttcta cctttgatgg ttttagcgcc gcgc (SEQ ID NO: 6)

FIGURE 33

MLAMKHQQELLEHQKLERHRQEQELEKQHREQKLOQLKNKEKG
KESAVASTEVMKMLQEFVLNKKKALAHRLNLNHCISSDPYWGKTQHSSLDQSSPPQS
GVSTSYNHPVLGMYDAKDDFPLRKTASEPNLKLRSRLKQKVAERRSSPLLRRKDGPPV
TALKKRPLDVTDSACSSAPGSGPSSPNNSSGSVSAENGIAPAVPSIPAETSLAHLVA
REGSAAPLPLYTSPSLPNITLGLPATGPSAGTAGQODTERLTLPALQQRLSLFPGTHL
TPYLSTSPLERDGGAAHSPLLQHMVLLEQPPAQAPLVTGLGALPLHAQSLVGADRVSP
SIHKLQRHRPLGRTQSAPLPQNAQALQHLVIQQQHQQFLEKHKQQFQQQQQLQMNKIIP
KPSEPARQPESHPEETEEELREHQALLDEPYLDRLPGQKEAHAQAGVQVKQEPIESDE
EEAEPPREVEPGQRQPSEQELLFRQQALLLEQQRIHQLRNYQASMEAAGIPVSFGGHR
PLSRAQSSPASATFPVSVQEPPTKPRFTTGLVYDTLMLKHQCTCGSSSSHPEHAGRIQ
SIWSRLQETGLRGKCECIRGRKATLEELQTVHSEAHTLLYGTNPLNRQKLDKLLGS
LASVFVRLPCGGVGVDSDTIWNEVHSAGAARLAVGCVVELVFKVATGELKNGFAVVRP
PGHHAEEESTPMGFCYFNSVAVAAKLLQQRLSVSKILIVDWDVHHGNGTQQAFYSDPSV
LYMSLHRYDDGNFFPGSGAPDEVGTGPGUGFNVNMAFTGGLDPPMGDAEYLAAFRTVV
MPIASEFAPDVVLVSSGFDAVEGHPTPLGGYNLSARCFGYLTKQLMGLAGGRIVLLE
GGHDLTAICDASEACVSALLGNELDPLPEKVLQQRPNANAVRSMEKVMETHSKYWRCL
ORTTSTAGRSLIEAQTCENEEAETVTAMASLSVGVKPAEKRPDEEPMEEEPPL (SEE ID NO: 7)

FIGURE 4A

```

1  ggaggttggtg  gggccgcccgc  cgcggagcac  cgtccccgcc  gccgcccag  cccgagcccgc
61  agcccgcgca  cccgcccgcg  ccgcccgcgc  cgcgcccgcg  acagcctccc  agcctggggcc
121  cccggcgggcg  ccgtggccgc  gtcccggctg  tcgcccgcgc  agcccgagcc  cgcgcccgcg
181  cgggtggcg  cgcaggtga  ggagatgcg  cgcggagcgc  cggagcagg  ctgagccgcg
241  ccgcccgcgc  ccgcccgcgt  aagcgcagcc  ccgcccgcgc  gccgcccgcg  catgttcgcg
301  cgcgcccgc  gcgcccgcgc  cagcctgcag  gccttgagc  ccgcccgcgc  tggagccgcg
361  cgggtccacac  ccgcccgcgc  cgcgcccgcg  ggaggggggg  gccagcgcgc  gccgcccgcg
421  gtgggacccg  ccggtcccca  ggcccgcgcg  gcccttctg  gaccttcca  cccgcccgcg
481  gaggcggctt  cgcgcccgcg  ggcccggggcg  cgggggtggg  cagggcaggc  agcggcgccg
541  tctcccgggtg  cggggcccgc  gcccccgcag  caggttcac  tgcagaagcc  agcggagccg
601  tctgttcaac  ttgtgggtta  cctggctcat  gagaccttg  cggcgaggct  cggcgcttga
661  acgtctgtga  cccagccctc  accgtcccg  tacttctatg  tgttgggtgg  agtttggagc
721  tcgttgagc  tatcgtttcc  gtggaaatct  tgagccatct  cgaatcacct  aaaggagtgg
781  acattgctag  caatgagctc  ccaaagccat  ccagatggac  tttctggccg  agaccagcca
841  gtggagctgc  tgaatccctg  ccgctgaaac  cacatgccc  gcacgggtgg  tgtggccacg
901  gcgctgcctc  tgcaagtggc  cccctcggca  gtgcccattg  acctgcgcct  ggaccaccag
961  ttctcactgc  ctgtggcaga  gccggccctg  cgggagcagc  agctgcagca  ggagctcctg
1021  gcgctcaagc  agaagcagca  gatccagagg  cagatccctc  tcgctgagtt  ccagaggcag
1081  cagagcagc  tctcccggca  gcacgaggcg  cagctccacg  agcacatcaa  gcaataacag
1141  gagatgctgg  ccattgaagc  ccagcaggag  ctgctggaac  accagcggaa  gctggagagg
1201  caccgcccag  agcaggagct  ggagaagcag  caccgggagc  agaagctgca  gcagctcaag
1261  aacaaggaga  agggcacaaga  gagtgcgctg  gccagcacag  aagtgaagat  gaagttacaa
1321  gaatttgtcc  tcaataaaaa  gaaggcgctg  gccacccgga  atctgaacca  ctgcatctcc
1381  agcgaccctc  gctactggta  cgggaaaaac  cagcacagtt  cccttgacca  gagtcttcca
1441  cccagagcgc  gagtgtgcag  ctctataaac  ccccggctcc  tgggaatgtg  cgacgcaaaa
1501  gatgacttcc  ctcttaggaa  aacagcttct  gaaccgaatc  tgaaattacg  gtccaggcta
1561  aagcagaaag  tggccgaaag  acggagcagc  cccctgttac  gcaggaaaga  cgggcccagt
1621  gtcactgctc  taaaaaagcg  tccgttggat  gtcacagact  ccgctgcag  cagcgcacca
1681  ggctccggac  ccagctcacc  caacaacagc  tccgggagcg  tcagcgcgga  gaacgggtatc
1741  gcgcccgcgc  tcccagcat  cccggcgag  acgagtttgg  cgcacagact  tgtggcacga
1801  gaaggctcgg  ccgctccact  tcccctctac  acatcgccat  ccttgcacca  catcacgctg
1861  ggcttgcctg  ccaccggccc  ctctgcgggc  acgscggggc  agcaggatcc  cgagagactc
1921  acccttcccg  cctccagca  gaggtctctc  ctttcccccg  gcacccacct  cactccctac
1981  ctgagcacct  cgccttggga  gcgggacgga  ggggagcgc  acagccctct  tctgcagcac
2041  atggtcttac  tggagcagcc  accggcacaa  gacccctctg  tcacaggcc  gggagcactg
2101  cccctccacg  cacagctcct  ggttgggtga  gacgggtgt  cccctccat  ccacaagctg
2161  cggcagcacc  gccactggg  gcggacccag  tcggcccgcg  tgcccagaa  cggccaggct
2221  ctgcagcacc  tggctatcca  gcagcagcat  cagcagtttc  tggagaaaca  caagcagcag
2281  ttccagcagc  agcaactgca  gatgaacaag  atcatcccca  agccaagcga  gccagcccgc
2341  cagccggaga  gccacccgga  ggagacggag  gaggagctcc  gtgagcacca  ggctctgctg
2401  gacgagccct  acctggaccg  gctgcccggg  cagaaggagg  cgcacgcaca  ggccggcgctg
2461  caggtgaagc  aggagcccat  tgagagcgat  gaggaagagg  cagagcccc  acgggagggtg
2521  gagccggggc  agcggcagcc  cagtgagcag  gagctgctct  tcagacagca  agccctcctg
2581  ctggagcagc  agcggatcca  ccagctgagg  aactaccagg  cgtccatgga  ggccgcccgc
2641  atccccgtgt  ccttcgycgg  ccacaggcct  ctgtcccggg  cgcagtcctc  acccgcgctc
2701  gccaccttcc  ccgtgtctgt  gcaggagccc  cccaccaagc  cgaggttcac  gacaggcttc
2761  gtgtatgaca  cgctgatgct  gaagcaccag  tgacactgcg  ggagtagcag  cagccacccc
2821  gagcacgccc  ggaggatcca  gagcatctgg  tcccgcctgc  agagacggg  cctccggggc
2881  aaatgcgagt  gcatccgagg  acgcaaggcc  acctggagg  agctacagac  ggtgactcgc
2941  gaagcccaca  cccctctgta  tggcagcaac  cccctcacc  ggcagaaact  ggacagtaag
3001  aaacttctag  gctcgctcgc  ctccgtgttc  gcccggtccc  ctgcgggtgg  tgttgggggtg
3061  gacagtgaac  ccataatgga  caggtgcac  tcggcggggg  cagcccgcct  ggctgtgggc
3121  tcgctggtag  agctggtctt  caaggctggc  acaggggagc  tgaggaatgg  ctttgcctgtg
3181  gtccgcccc  ctggacacca  tgcggaggag  agcacgcca  tgggcttttg  ctacttcaac
3241  tccgtggccg  tggcagccaa  gcttctgcag  cagaggttga  gcgtgagcaa  gatccctcatc
3301  gtggactggg  acgtgcacca  tggaaacggg  acccagcagg  ctttctacag  cgaccctagc
3361  gtccctgtaca  tgtccctcca  ccgtacgac  gatgggaact  tcttcccagg  cagcggggctt
3421  cctgatgagg  tgggcacagg  gcccgcgctg  ggttccaacg  tcaacatggc  tttcacgggc
3481  ggcctggacc  ccccatggg  agacgctgag  tacttggcgg  ccttcagaa  ggtgggtcatg
3541  ccgacgcga  gcgagcttgc  cccgagatgt  gtcctggctg  catcaggctt  cgatgcccgtg

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FIGURE 4B (SHEET 1 OF 3)

3601	gagggccacc	ccacccctct	tgggggctac	aacctctccg	ccagatgctc	cgggtacctg
3661	acgaagcagc	tgatgggcct	ggctggcggc	cggatgtccc	tggccctcga	gggaggccac
3721	gacctgaccg	ccatttgcca	cgcctcggaa	gcattgtctt	ctgecttgct	gggaaacgag
3781	cttgatccct	tcccagaaaa	ggtctttacag	caaagaccca	atgcaaacgc	tgtccgttcc
3841	atggagaaaag	tcatggagat	ccacagcaag	tactggcgct	gcctgcagcg	cacaacctcc
3901	acagcggggc	gtctctctgat	cgaggctcag	acctgscgaga	acgaagaagc	cgagacgggtc
3961	accgccatgg	cctcgctgtc	cgtgggcgtg	aaqcccgcgc	aaaagagacc	agatgaggag
4021	cccatgggaag	aggagccgcc	cctgtagcac	tccctcgaag	ctgctgttct	cttgtctgtc
4081	tgtctctgtc	ttgaagctca	gccaagaaac	cttcccgctg	cacgcctgcg	tcccaccgtg
4141	gggctctctt	ggagcaccca	gggacaccca	gcctgcaaca	gccacgggaa	gcctttctgc
4201	cgcccaggcc	cacaggctct	gagacgcaca	tgcacgcctg	ggcgtggcag	cctcacaggg
4261	aacacgggac	agacgcgcgc	gacgcgcaga	cacacggaca	cgcggaagcc	aagcacactc
4321	tggcgggtcc	cgcaagggac	gccgtggaaag	aaaggagcct	gtggcaacag	gcggccgagc
4381	tgccgaattc	agctgacacg	aggcacagaa	aacaaatatc	aaagatctaa	taatacaaaa
4441	caaacttgat	taaaactggg	gcttaaagtt	tattaccac	aactccacag	tctctgtgta
4501	aaccactcga	ctcatcttgt	agcttatctt	ttttttaazg	aggacgtttt	ctacggctgt
4561	ggcccgcctc	tgtgaaccat	agcgggtgtg	ggcggggggg	ctgcacccgg	gtgggggaca
4621	gagggacctt	taaaagaaaac	aaaactggac	agaaacagga	atgtgagctg	ggggagctgg
4681	cttgagtttc	tcaaaaagcca	tgggaagatg	cgagtctgtg	cctttttttt	tattgctctg
4741	gtggattttt	gtggctgggt	tttctgaagt	ctgaggaaca	atgccttaag	aaaaaacaaa
4801	cagcaggaat	cggtgggaca	gtttcctgtg	gccagccgag	cctggcagtg	ctggcaccgc
4861	gagctggcct	gacgcctcaa	gcacgggcac	cagccgtcat	ctccggggcc	aggggctgca
4921	gcccggcggt	ccctgttttt	ctctattgtc	gtttaagaaa	aatggaggta	gttccaaaaa
4981	agtggcaaat	cccgctggag	gttttgaagt	ccaacaaatc	ttaaaccgaat	ccaaagtgtt
5041	ctcacacgtc	acatacgatc	gagcatctcc	atctggctgt	gaagcatgtg	gtaggcacac
5101	ttgcagtgtt	acgatacgaa	tgccttttct	taaaagcaag	tagcatgaag	tartgcttaa
5161	atcttaggta	taaataaata	tatatacgta	taatatatac	tccaatgtat	tccaagctaa
5221	gaaacttact	tgattcttat	gaaatcctga	taaaatatct	ataatgcatt	tatagaaaaa
5281	gtatatatat	atatataaaa	tgaatgcaga	ttgcgaaggc	ccctgcaaat	ggatggcttg
5341	tgaatttgct	ctcaaggctg	ttatggaaag	ggaatcctgac	tgattgaaat	tcattgtttt
5401	tcaagctcca	gattggctag	acttcagatc	gccaacacac	tgcacctg	gcactaccc
5461	tacaagtctg	tactttccat	ctaattatct	tctaacagaa	cgcctcccg	ccccaaagcc
5521	tcatgcacat	atgtacctaa	tgagtcttct	tagcaazgaa	tataaatctg	ctgttgatct
5581	ttgtatgaat	cttttccaca	aaagatcctg	aataagcatc	gttttatgaa	ttttacattt
5641	ctcctcacca	tttagcaatt	ttctgaatgg	taataatgtc	taaatcttct	ctcttcttga
5701	attctctgct	gtacattttt	ttttaccttt	caaaggcttt	taatttatct	tgttcttatt
5761	tttgtagcat	gagtrctctg	cagcgtacag	aattgttgct	gtcagattct	atttctcagaa
5821	agttagagga	gggaccgtag	gtctttctcg	agtgcaccca	acgattgtgt	cttctctggg
5881	ctgtcctagg	agctgtataa	agaagcccag	gggctctttt	taactttcaa	cactagtagt
5941	attacgaggg	gtgggtgtgt	tttccccctc	gtggcaaggc	caggcagggt	tgtctaggat
6001	gcccggccac	cctgggaggc	ttgccagatg	ccggggggcag	tcagcattaa	tgaaactcat
6061	gtttaaactt	ctctgaccac	atcgtcagga	tagaattcta	acttgagtct	tccaagacc
6121	ttttgagcat	gtcagcaatg	catggggcac	acgtggggct	ctttaccac	ttgggttttt
6181	ccactgcagc	cacgtggcca	gccctggatt	ttggagccct	tggctgcaag	gaaccacagg
6241	acccttggtg	cctggtgaac	ctgcagggag	ggatatgatt	cctgaccagg	acagccagtc
6301	tttactcttt	ttctcttcaa	cagtaactga	cagtcacgtt	ttactggtaa	cttattctcc
6361	agcacatgaa	gccaccagtt	tcattccaaa	gtgtatattg	ggttcagact	tgggggcaga
6421	agttcagaca	caccgtgctc	aggagggacc	cagagccgag	tttcggagt	tggtaaggtt
6481	tacagggtag	cttctgaaat	taactcaaac	ttttgaccaa	atgagtgcag	attcttgga
6541	tcaacttggt	actgggctgc	tgatggctcag	ctctgagaca	gtgggttgag	agcaggcaga
6601	acggtcttgg	gacttgtrtg	actttccctt	ccctgggtgg	cactcttttg	tctgaagccc
6661	agattggcaa	gaggagctgg	tccattcccc	attcatggca	cagagcagtg	gcaggggccc
6721	gctagcaggc	tcttctggcc	tcccggcctt	catctctctg	atagccctct	ggggatctct
6781	ccacctgccc	tcttaccctg	ccgtggctta	tggggaggga	tgcattatct	cacttttttt
6841	ttttaagcag	atgatgggat	aacatggact	gctcagtctg	caggttatca	gtggggggac
6901	ttaattctaa	tctcattcaa	atggagacga	cctctgcaaa	ggcctggcag	ggggaggcac
6961	gtttcatctg	tcagctcact	ccagcttccac			

FIGURE 4B (SHEET 2 OF 3)

7321 cacgccccac cagcaggcgg ctgtcccggg ggccgtggcc cgtgaggact ggccgcccct
 7381 cccagcgctc ccagggtctt ggttctggag ggccactttg tcaagggtgt tcagtttttc
 7441 tttacttctt ttgaaaatct gtttgcaagg ggaaggacca ttctgtaatg gtctgacaca
 7501 aaagcaagtt tgatttttgc agcactagca atggactttg ttgtttttct ttttgatcag
 7561 aacattcctt ctttactggt cacagccacg tgctcattcc attcttcttt ttgtagactt
 7621 tgggcccacg tgttttatgg gcattgatac atatatataa atatagatat aaatatatat
 7681 gaatatattt ttttaagttt cctacacctg gaggttgcat ggactgtacg accggcatga
 7741 ctttataatt tatcacagatt ttgcacgcca aactcggcag ctttggggaa gaagaaaaat
 7801 gcctttctgt tcccctctca tgacatttgc agatacaaaa gatggaaatt tttctgtaaa
 7861 acaaaaacct gaaggagagg agggcgggga agtttgcgtc ttattgaact tattcttaag
 7921 aaattgtact ttttattgta agaaaaataa aaaggactac ttaaacaatt gtcatatata
 7981 gaaaaaaaagt ttatctagca cttgtgacat accaataata gagtttattg tatttatgtg
 8041 gaaacagtgt tttagggaaa ctactcagaa ttcacagtga actgcctgtc tctctcgagt
 8101 tgatttggag gaattttgtt ttgttttgtt ttgtttgttt ccttttatct ccttccacgg
 8161 gccaggcgag cgcgcgccgc cctcactggc cttgtgacgg tttattctga ttgagaactg
 8221 ggcggactcg aaagagtccc cttttccgca cagctgtgtt gactttttaa ttacttttag
 8281 gtgatgtatg gctaagattt cactttaagc agtcgtgaac tgtgcgagca ctgtggttta
 8341 caattatact ttgcategaa aggaaaccat ttcttcattg taacgzagct gagcgtgttc
 8401 ttagctcggc ctactcttgt ctctggcatt gattaaaagt ctgctattga aagaaaaag

(SEQ ID NO: 8)

FIGURE 4B (SHEET 3 OF 3)

7321
7381
7441
7501
7561
7621
7681
7741
7801
7861
7921
7981
8041
8101
8161
8221
8281
8341
8401

LRQGGTLTGKFMSTSSIPGCLLGVALEGDGSPHGHASLLQHVLL
LEQARQQSTLIAVPLHGQSPLVTGERVATSMRTVGKLP RHRPLSRTQSSPLPQSPQAL
QQLVMQQQHQQFLEKQKQQQLQLGKILTKTGELPRQPTTHPEETEEELTEOQEVLLGE
GALTMPREGSTESESTQEDLEEEDDEEDGEEEEDCIQVKDEEGESGAEEGPDLEEPGA
GYKKLFSDAQPLQPLQVYQAPLSLATVPHQALGRTQSSPAAPGGMKSPPDQPVKHLFT
TGVVYDTFMLKHQCMCGNTHVHPEHAGRIQSIWSRLQETGLLSKCERIRGRKATLDEI
QTVHSEYHTLLYGTSPLNRQKLDSKKLLGPISQKMYAVLPCGGIGVDSDTVWNEMHSS
SAVRMAVGCLLELAFKVAAGELKNGFAIIRP?GHHAEEESTAMGFCFFNSVAITAKLLQ
QKLNVGKVLIVDWDIHHGNGTQQAFYNDPSVLYISLHRYDNGNFFPGSGAPEEVGGGP
GVGYNVNVAWTGGVDPPIGDVEYLTAFRTVVMPIAHEFS PDVVLVSAGFDAVEGHLSP
LGGYSVTARCFGHLTRQLMTLAGGRVVLALEGGHDLTAICDASEACVSALLSVELQPL
DEAVLQQKFNINAVATLEKVIETIQSKHWSCVQKFAAGLGRSLREAQAGETEEAETVSA
MALLSVGAEQAAQAAAAREHSRPAEEPMEQEPAL (SEQ ID. No: 9)

FIGURE 5A

1 cccctgcggca ggggtggcacg ctgaccggca agttcatgag cacatccctct attcctggct
 61 gcctgctggg cgtggcactg gagggcgacg ggagccccc cgggcatgcc tccctgctgc
 121 agcatgtgct gttgctggag caggcccggc agcagagcac cctcattgct gtgccactcc
 181 acggggcagtc cccactagtg acgggtgaac gtgtggccac cagcatgagg acggtaggca
 241 agctcccggc gcacggccc ctgagccgca ctgagtcctc accgctgccc cagagtcctc
 301 agggccctgca gcagctggtc atgcaacaac agcaccagca gtccctggag aagcagaagc
 361 agcagcagct acagctgggc aagatccctc ccaagacagg ggagctgccc aggcagccca
 421 ccacccaccc tgaggagaca gaggaggagc tgacggagca gcaggaggtc ttgctggggg
 481 agggagccct gaccatgccc cgggagggct ccacagagag tgagagcaca caggaagacc
 541 tggaggaggga ggacgaggaa gaggatgggg agggaggagg ggattgcatc cagggttaagg
 601 acgaggaggg cgagagtggg gctgaggagg ggcccagact ggaggagcct ggtgctggat
 661 acaaaaaact gttctcagat gccagccgct tgcagccttt gcagggtgtac caggcgcccc
 721 tcagccctggc cactgtgccc caccaggccc tggggcgtac ccagtcctcc cctgctgccc
 781 ctggggggcat gaagagcccc ccagaccagc ccgtcaagca cctctcacc acagggtgtg
 841 tctacgacac gttcatgcta aagcaccagt gcatgtgagg gaacacacac gtgcacctg
 901 agcatgctgg ccggtccag agcatctggg ccgggtgca ggagacaggc ctgcttagca
 961 agtgcgagcg gatccgaggt cgcaaagcca cgctagatga gatccagaca gtgactctg
 1021 aataccacac cctgctctat gggaccagtc ccctcaaccg gcagaagcta gacagcaaga
 1081 agttgctcgg ccccatcagc cagaagatgt atgctgtgct gccctgtggg ggcctcgggg
 1141 tggacagtga caccgtgtgg aatgagatgc actcctccag tgcgtgtggt atggcagtgg
 1201 gctgcctgct ggagctggcc ttcaagggtg ctgcaggaga gctcaagaat ggatttgcca
 1261 tcatccggcc cccaggacac cagccgagg aatccacagc catgggatcc tgcctcttca
 1321 actctgtagc catcaccgca aaactcctac agcagaagtt gaacgtgggc aaggctctca
 1381 tcgtggactg ggacattcac catggcaatg gcacccagca ggcttctat aatgacccct
 1441 ctgtgctcta catctctctg catcgctatg acaacgggaa ctctcttcca ggctctgggg
 1501 ctccctgaaga ggttgggtga ggaccaggcg tgggggtacaa tgtgaacctg gcatggacag
 1561 gaggtgtgga ccccccatc ggagacgtgg agtaccttac agccttcagg acagtgggtg
 1621 tgcccatctg ccacgagttc tcacctgatg tggctcctagt ctccgcccgg tttgatgctg
 1681 ttgaaggaca tctgtctcct ctgggtggct actctgtcac cgccagatgt tttggccact
 1741 tgaccaggca gctgatgacc ctggcagggg gacgggtggg gctggccctg gagggaggcc
 1801 atgacttgac cgccatctgt gatgcctctg aggtctgtgt ctcggctctg ctacgctag
 1861 agctgcagcc cttggatgag gcagtcctgc agcaaaaagc caacatcaac gcagtggcca
 1921 cgctagagaa agtcacagag atccagagca aacactggag ctgtctgag aagttcggcg
 1981 ctggctctgg ccggtccctg cgagaggccc aagcaggtea gacgaggag gccgagactg
 2041 tgagcgccat ggccttgcct tcggtggggg ccgagcaggc ccagcctgct gcagcccggg
 2101 aacacagccc caggccggca gaggagccca tggagcagga gcctgcccct tgacgccccg
 2161 gcccccatcc ctctgggctt caccatctgt attttcttta tttctcttat taaaaacaaa
 2221 aagtcacaca ttc (SEQ ID NO:10)

FIGURE 5B

1 mtstgqdstt trqrrsrqnp qsppqdssvt skrnikkav prsipnlaev kkkgkmkklg
 61 qameedlivg lqgmdlnlea ealagtglvl deqlnefhcl wddsfpegpe rlhaikeqli
 121 qeglldrcvs fgarfaekee lmlvhsleyi dlmettqymn egelrvladt ydsvyllhps
 181 yscacclasgs vlrlvdavlg aeirngmaii rppghhaqhs lmdgycmfhn vavaaryaqq
 241 khrrrvliv dwdvhhgqgt qftfdqpsv lyfsihryeq grfwphlkas nwsttgfgqg
 301 qgytinvpwn qvgmrdadyi aafhlvllpv alefqpqlvl vaagfdalqg dpkgemaatp
 361 agfaqlthll mglaggklil sleggynlra laegvsaslh tllgdpcpml espgapcrsa
 421 qasvscalea lepfwevlvr stetverdnm eednveesee egpweppvlp iltwplqsr
 481 tglvydqnmn nhcnlwdshh pevpqrilri mcrleelga grcltlprp ateaelltch
 541 saeyvghlra tekmtrelh ressnfdisy icpstfacaq latgaacrlv eavlsgevl
 601 gaavvrppgh haeqdaacgf cffnsvavaa rhaqtisgha lrilivdwdv hhngntqhmf
 661 eddpsvlyvs lhrydhgtff pmgdegassq igraagtgt vnvawngprm gdadylaawh
 721 rlvlpiaief npelvlvsag fdaargdplg gcqvspegia hlthllmgl sgrilileg
 781 gynltsises maactrlg dppplltpr pplsgalasi tetiqvhrry wrslrvmkve
 841 dregpssskl vtkkapqak prlaermtr ekkvleagmg kvtsasfgee stpgqtnset
 901 avvaltqdpq seatggatl aqtiseaaig gamlgqttse eavggatpdq ttseetvga
 961 ildqttseda vggatlgqtt seeavggatl aqtiseaame gatldqtse eapggatliq
 1021 tplasstdhq tpptspvqgt tpqispstli gslrtelgs esqgasesqa pgeenllgea
 1081 aggqdmadsm lmqgsrgld qaifyavtvl pwcphlvavc pipaagldvt qpcgdcgtiq
 1141 enwvclscyq vycgryingh mlqhhgnsgh plvlsyids awcyycqayv hhqalldvkn
 1201 iahqnkfged mphph (SEQ ID NO:11)

FIGURE 6A

1 gggcagtcct ctgaggagcg gggctggttg aaacgctagg ggcgggatct ggcggagtgg
 61 aagaaccgcg gcagggggcca agcctcctca actatgacct caaccggcca ggattccacc
 121 acaaccaggc agcgaagaag taggcagaac cccagtcgc cccctcagga ctccagtgtc
 181 acttcgaagc gaaatattaa aaagggagcc gtccccgct ctatcccaa tctagcggag
 241 gtaaagaaga aaggcaaat gaagaagctc ggccaagcaa tggaagaaga cctaactgtg
 301 ggactgcaag ggatggatct gaaccttgag gctgaagcac tggctggcac tggcttgggtg
 361 ttggatgagc agttaaatga attccattgc ctctgggatg acagcttccc ggaaggccct
 421 gageggctcc atgccatcaa ggagcaactg atccaggagg gcctcctaga tgcctgcgtg
 481 tcccttcagg cccggtttgc tgaaaaggaa gagctgatgt tggttcacag cctagaatat
 541 attgatctga tggaacaac ccagtacatg aatgaggagg aactccgtgt cctagcagac
 601 acctacgact cagtttatct gcatccgaac tcatactcct gtgcctgcct ggcctcaggc
 661 tctgtcctca ggctggtgga tgcggctctg ggggctgaga tccggaatgg catggccatc
 721 attaggctc ctggacatca cggccagcac agtcttatgg atggctattg catgttcaac
 781 cactggctg tggcagcccg ctatgctcaa cagaaacacc gcatccggag ggtccttate
 841 gtagattggg atgtgcacca cggtaagga acacagtta ccttcgacca ggacccagc
 901 gtctctatt tctccatca ccgtacgag cagggtaggt tctggccca cctgaaggcc
 961 tctaactggt ccaccacagg ttccggcca ggccaaggat ataccatcaa tgtgccttgg
 1021 aaccaggtgg ggatgcggga tctgactac attgctgctt tctgcacgt cctgctgcca
 1081 gtcgcccctg agttccagcc tcagctggc ctggtggctg ctggattga tgcctgcaa
 1141 ggggaccca agggtagat ggcgccaact ccggcagggt tgcctcagct aaccacctg
 1201 ctcatgggtc tggcaggagg caagctgac ctgtctctgg aggttggcta caacctccgc
 1261 gccctggctg aaggcgtcag tcttcgctc cacaccttc tgggagacc ttgccccatg
 1321 ctggagtcac ctggtgcccc ctgcccaggt gcccaggctt cagtttctg tgcctggaa
 1381 gcccttgagc ccttctggga ggttcttctg agatcaactg agaccgtgga gagggacaac
 1441 atggaggagg acaatgtaga ggagagcgag gaggaaggac cctgggagcc cctgtgctc
 1501 ccaactctga catggccagt gctacagtct cgcacagggc tggctatga ccaaatatg
 1561 atgaatcact gcaacttgtg ggacagccac caccctgagg taccacagcg catcttgcgg
 1621 atcatgtgcc gtctggagga gctgggctt gccgggcgt gcctaccct gacaccgcgc
 1681 cctgccacag aggtgagct gctaccctgt cacagtgtg agtacgtggg tcatctcgg
 1741 gccacagaga aatgaaaac ccgggagctg caccgtgaga gtccaactt tgactccatc
 1801 tatacttccc ccagtacct cgcctgtgca cagcttgcca ctggcgtgc ctgcccctg
 1861 gtggaggctg tgcctcagg agaggttctg aatggtgctg ctgtggtgcg tccccagga
 1921 caccacgcag agcaggatgc agcttgcgtg ttttgcctt tcaactctg ggctgtggct
 1981 gctcgccatg cccagactat cagtgggcat gccctacgga tctgattgt ggattgggat
 2041 gtccaccacg gtaatggaac tcagcacatg ttgaggatg acccagtggt gctatatgtg
 2101 tccctgcacc gctatgatca tggcaccttc tccccatgg gggatgaggg tgcacgagc
 2161 cagatcgccg gggctgcggg cacaggcttc accgtcaacg tggcatgga cgggccccgc
 2221 atgggtgatg ctgactacct agctgcctgg catgcctgg tgcctccat tgcctacgag
 2281 ttaaccacg aactggtgct ggtctcagct ggcttctgct ctgcacgggg ggatccgctg
 2341 gggggctgcc aggtgtcacc tgagggttat gccacctca cccactgct gatgggcctt
 2401 gccagtggcc gcattacct taccatagag ggtggctata acctgacatc catctcagag
 2461 tccatggctg cctgcacacg ctccctcctt ggagaccac caccctgct gaccctgcca
 2521 cggccccac taccaggggc cctggcctca atactgaga ccatccaagt ccatgcaga
 2581 tactggcgca gcttacgggt catgaaggta gaagacagag aaggacctc cagtctaa

Figure 6B (sheet 1 of 2)

1 mdlrvqrrpp vepppeptll alqrpqrlhh hlflaglqqq rsvepmrlsm dtpmpelqvg
61 pqqelrqll hkdkskrsav assvvkqkla evilkkqaa lertvhpns gipyrtlepl
121 etegatrsm l ssflppvpsl psdppehfpl rktvsepnk lrykpkksle rrknpllrke
181 sappslrrrp aetlgdssps ssstpascgs spndsehgpn pilgdsdrrt hptlgprgpi
241 lgsphtplfl phglepeagg tlp srlqpil lldpsgshap lltvpglgpl pfhfaqlmt
301 terlsgsgh wplsrtsep lppsatappp pgpmqprleq lkthvqvkr sakpsekprl
361 rqip saedle tdgggpgqv ddglehrelg hgqpeargpa plqqhpqvll weqqrlagrl
421 prgstgdtvl lplaaggghp lsraqsspaa paslsapepa sqarvlssse tpartlpft
481 gliydsvmlk hqcscgdnsr hpehagriqs iwsrlqergl rsqceclgr kasleelqsv
541 hserhvlllyg tnplsrlkld ngklagllaq rmfemlpcgg vgvtdtdiwn elhssnaarw
601 aagsvtdlaf kvasrelkng favvrppghh adhstamgfc ffnsvaiacr qlqqqskask
661 askilivdwd vhhgngtqqt fyqdpsvlyi slhrhddgnf fpgsgavdev gagsgegfnv
721 nvawaggldp pmgdpeylaa frivvmpiar efspdlvlvs agfdaaeghp aplggyhysa
781 kcfgymtqq l mnlaggavvl alegghdla icdaseacva allgnrvdpl seegwkqkpq
841 pqchplsgr dpgaq (SEQ ID NO: 13)

FIGURE 7A

Figure 7A

1 ataataccta ccttgcagga ccacgacagg attaagtgag gaaaaacccc catgagagtg
 61 ttttgccatt gtcaagtgag cctgagggag gctgaggggg gatcaggctg tatcatgccc
 121 ccgaggacaa actttccagt ttaccctgct cctctctct gtccttaggc tgccccaggc
 181 cctgtgcaga cacaccagge cctcagccgc agcccatgga cctgcgggtg ggccagcggc
 241 cccagtgga gccccacca gagcccat tgctggccct gcagcgtccc cagcgcctgc
 301 accaccacct ctcttagca ggcctgcagc agcagcgtc ggtggagccc atgaggctct
 361 ccatggacac gccgatgccc gagttgcagg tgggacccca ggaacaagag ctgcggcagc
 421 ttctccaaa ggacaagagc aagcgaagt ctgtagccag cagcgtggtc aagcagaagc
 481 tagcggaggt gattctgaaa aaacagcagg cggccctaga aagaacagtc catcccaaca
 541 gccccggcat tcctacaga accctggagc cctggagac ggaaggagcc acccgctcca
 601 tgctcagcag cttttgcct cctgttccca gctgcccag tgacccccc gagcacttcc
 661 ctctgcgcaa gacagtctc gagcccaacc tgaagctgcg ctataagccc aagaagtccc
 721 tggagcggag gaagaatcca ctgtccgaa aggagagtgc gccccccagc ctccggcggc
 781 ggccgcgaga gacctcgga gactctccc caagtagtag cagcacgccc gcatcagggt
 841 gcagctcccc caatgacagc gagcacggcc ccaatcccat cctgggcgac agtgaccgca
 901 ggacctacc gactctgggc cctcgggggc caatctggg gagccccac actcccctct
 961 tctgccccca tggttggag cccgaggctg ggggcacctt gccctctgc ctgcagccca
 1021 ttctctctt ggacctcca ggtctcatg ccccgctgt gactgtccc gggcttgggc
 1081 cettgcccct cactttgcc cagtcctaa tgaccaccga gggctctct gggtcaggcc
 1141 tccactggcc actgagccg actegctcag agccctgcc cccagtgcc accgctcccc
 1201 caccgcccgg ccccatgcag cccgcctgg agcagctcaa aactcagtc caggtgatca
 1261 agaggtcagc caagccgagt gagaagcccc ggctgcggca gataccctcg gctgaagacc
 1321 tggagacaga tggcggggga ccgggccagg tggtagcga tggcctggag cacagggagc
 1381 tgggcatagg gcagcctgag gccagaggcc ccgctctct ccagcagcac cctcaggtgt
 1441 tgctctggga acagcagcga ctggctgggc ggctcccccg gggcagcacc ggggacactg
 1501 tgctgttcc tctggcccag ggtgggcacc ggctctgtc ccgggctcag tcttccccag
 1561 ccgcacctgc ctactgtca gccccagagc ctgccagcca ggcccagtc ctctccagct
 1621 cagagacccc tgccaggacc ctgccctca ccacagggt gatctatgac tcggtcagc
 1681 tgaagacca gtgtctctgc ggtgacaaca gcaggcacc ggagcacgcc ggccgcatcc
 1741 agagcatctg gtcccggctg caggagcggg ggctccggag ccagtgtgag tgtctccgag
 1801 gccggaagge ctccctggaa gagctgcagt cggctccact tgagcggcac gtgtctctct
 1861 acggcaccaa ccgctcagc cgcctcaaac tggacaacgg gaagctggca gggctcctgg
 1921 cacagcggat gttgagatg ctgccctgtg gtgggggttg ggtggacact gacaccatct
 1981 ggaatgagct tcattctcc aatgcagccc gctgggcccg tggcagtgtc actgacctg
 2041 ccttcaagt ggcttctct gagctaaaga atggttctc tgtggtgcgg cccccaggac
 2101 accatgcaga tcattcaaca gccatgggt tctgttctt caactcagt gccatgcct
 2161 gccggcagct gcaacagcag agcaaggcca gcaaggccag caagatctc attgtagact
 2221 gggacgtgca ccatggcaac ggcacccagc aaaccttcta ccaagacccc agtgtgtct
 2281 acatctccct gcategccat gacgacggca acttctccc ggggagtggg gctgtggatg
 2341 aggtaggggc tggcagcggg gagggcttca atgtcaatgt ggctgggct ggaggtctgg
 2401 acccccccat gggggatcct gactacctgg ctgtttcag gatagtcgt atgcccacg
 2461 cccgagagtt ctctccagac ctagtctgg tgtctgtgg atttgatgt getgagggtc
 2521 acccgggccc actgggtggc taccatgtt ctgccaatg tttggatac atgacgcagc
 2581 aactgatgaa cctggcagga ggcgcagtgg tgctggcctt ggagggtggc catgacctca

Figure 7A (sheet 1/2)

2641 cagccatctg tgacgectct gaggcctgtg tggctgctct tctgggtaac aggggtggatc
2701 ccctttcaga agaaggctgg aaacagaaac cccaacctca atgccatecg ctctctggag
2761 gccgtgatcc ggggtcacag taaatactgg ggctgcatgc agcgccctggc ctctgtcca
2821 gactcctggg tgcctagagt gccaggggct gacaaagaag aagtggaggc agtgaccgca
2881 ctggcgctcc tctctgtggg catcctggct gaagataggc cctcggagca gctggtggag
2941 gaggaagaac ctatgaatct ctaaggctct ggaacctct gcccgccac catgcccttg
3001 ggacctggtt ctcttctaac cctggcaat agccccatt cctgggtctt tagagatcct
3061 gtgggcaagt agttggaacc agagaacagc ctgcctgctt tgacagttat cccagggagc
3121 gtgagaaaat c (SEQ ID NO: 14)

FIGURE 7B
(Sheet 2/2)

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1 meepeepads gqslvpvyiy speyvsmcde lakipkrasm vhslicayal hkqmrivkpk
61 vasmeematf htdaylqhlq kvsqegdddh pdsieyglgy dcpategifd yaaaiggati
121 taaqclidgm ckvainwsgg whhakkdeas gfcylndavl gilrlrrkfe rilyvdldlh
181 hgdgvedafs ftskvmtvsl hkfspgffpg tgdvsvdvglg kgryysvnpv iqdgigdeky
241 yqicesvlke vyqafnpkav vlqlgadtia gdpmsfnmt pvgigkclky ilqwqlatli
301 lggggynlan tarcwtyltg vilgktsse ipdhefftay gpdyvletp scrpdrneph
361 riqqilnyik gnlkhvv (SEQ ID NO:15)

FIGURE 8A

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1 gaaattcggc acgagctcgt gccgaattcg gcacgagaac ggttttaagc ggaagatgga
 61 ggagccggag gaaccggcgg acagtgggca gtcgctggc ccggtttata tctatagtc
 121 cgagtatgtc agtatgtgtg actccctggc caagatcccc aaacgggcca gtatggtgca
 181 ttctttgatt gaagcatatg cactgcataa gcaaatgagg atagttaagc ctaaagtggc
 241 ctccatggag gagatggcca cctccacac tgatgcttat ctgcagcacc tccagaaggt
 301 cagccaagag ggcgatgatg atcatccgga ctccatagaa tatgggctag gttatgactg
 361 cccagccact gaaggatgat ttgactatgc agcagctata ggaggggcta cgatcacagc
 421 tgcccaatgc ctgattgacg gaatgtgcaa agtagcaatt aactggtctg gaggggtggc
 481 tcatgcaaag aaagatgaag catctggttt ttgttatctc aatgatgctg tcttggaat
 541 attacgattg cgacggaaat ttgagcgtat tctctacgtg gatttggatc tgcaccatgg
 601 agatggtgta gaagacgcat tcagtttcac ctccaaagtc atgaccgtgt ccctgcacaa
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 721 acggtactac agtgtaaagtg tgccattca ggatggcata caagatgaaa aatattacca
 781 gatctgtgaa agtgactaa aggaagtata ccaagccttt aatcccaaag cagtgtctt
 841 acagctggga gctgacacaa tagctgggga tcccatgtgc tctttaaca tgactccagt
 901 gggaattggc aagtgtctta agtacatctt tcaatggcag ttggcaacac tcattttggg
 961 aggaggaggc tataaccttg ccaacacggc tcgatgctgg acatacttga ccgggggtcat
 1021 cctagggaaa acactatctt ctgagatecc agatcatgag ttttcacag catatggtec
 1081 tgattatgtg ctggaaatca cgccaagctg ccggccagac cgcaatgagc cccaccgaat
 1141 ccaacaaatc ctcaactaca tcaaaggga tctgaageat gtgtctagt tgacagaaag
 1201 agatcagggt tccagagctg aggagtgggt cctataatga agacagcgtg tttatgcaag
 1261 cagtttgtgg aatttgtgac tgcagggaaa atttgaaaga aattacttcc tgaaaatttc
 1321 caaggggcat caagtggcag ctggcttctt ggggtgaaga ggcaggcacc ccagagtcct
 1381 caactggacc taggggaaga aggagatata ccacatttaa agttcttatt taaaaaaca
 1441 cacacacaca aatgaaattt ttaatctttg aaaattttt ttaagcgaat tggggagggg
 1501 agtattttta tcatcttaa tgaaacagat cagaagctgg atgagagcag tcaccagttt
 1561 gtagggcagg aggcagctga caggcagggn tngggccctn ggaccancca ngtggagccc
 1621 tgggagagan ggtactgac ngcagactgg gagg (SEQ ID NO:16)

FIGURE 8B

Figure 9A

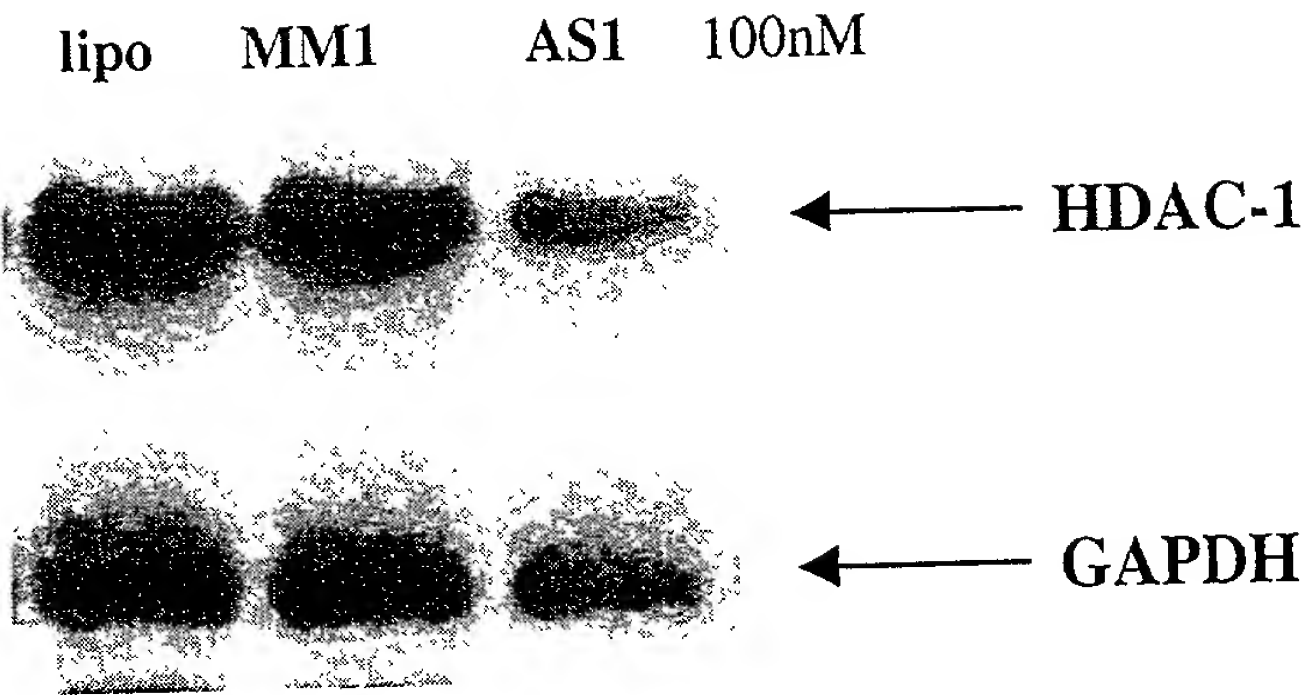


Figure 9B

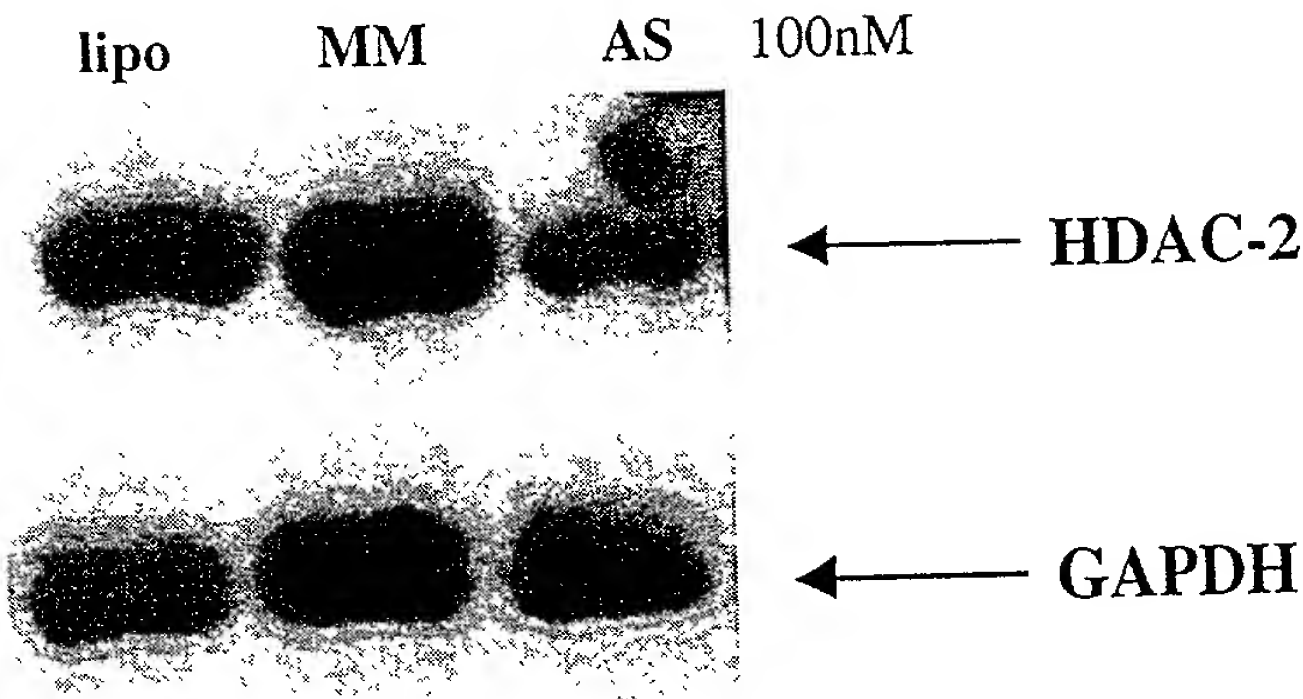


Figure 9C

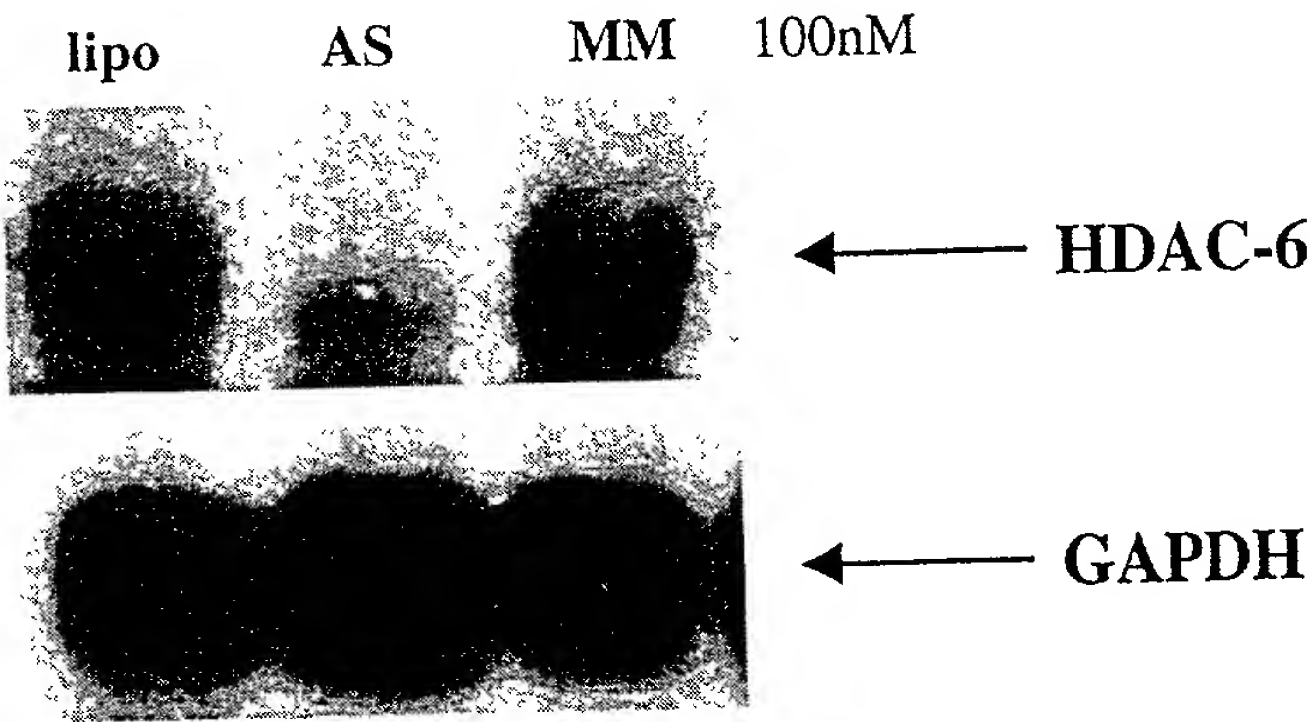


Figure 9 D

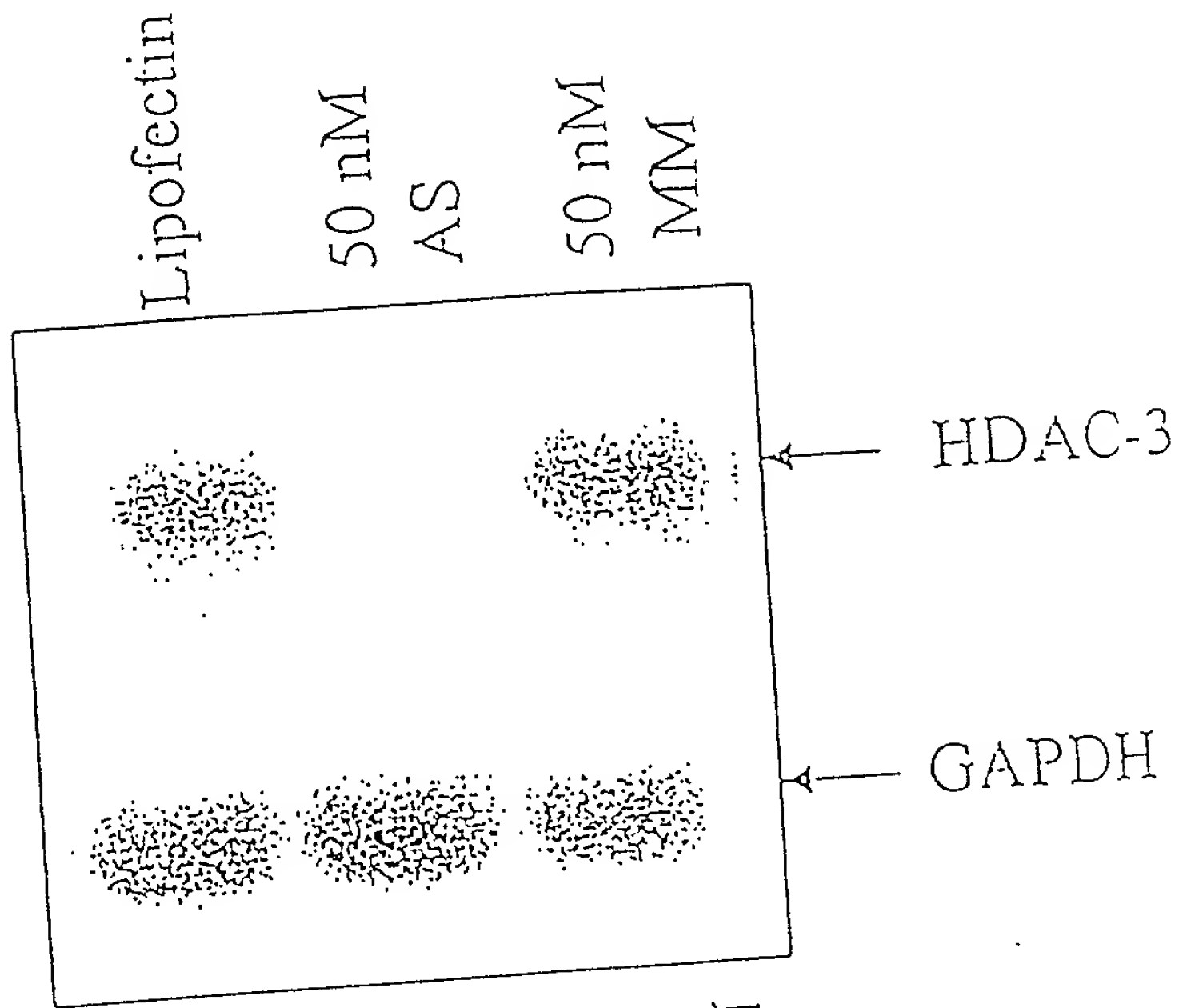


Figure 9 E

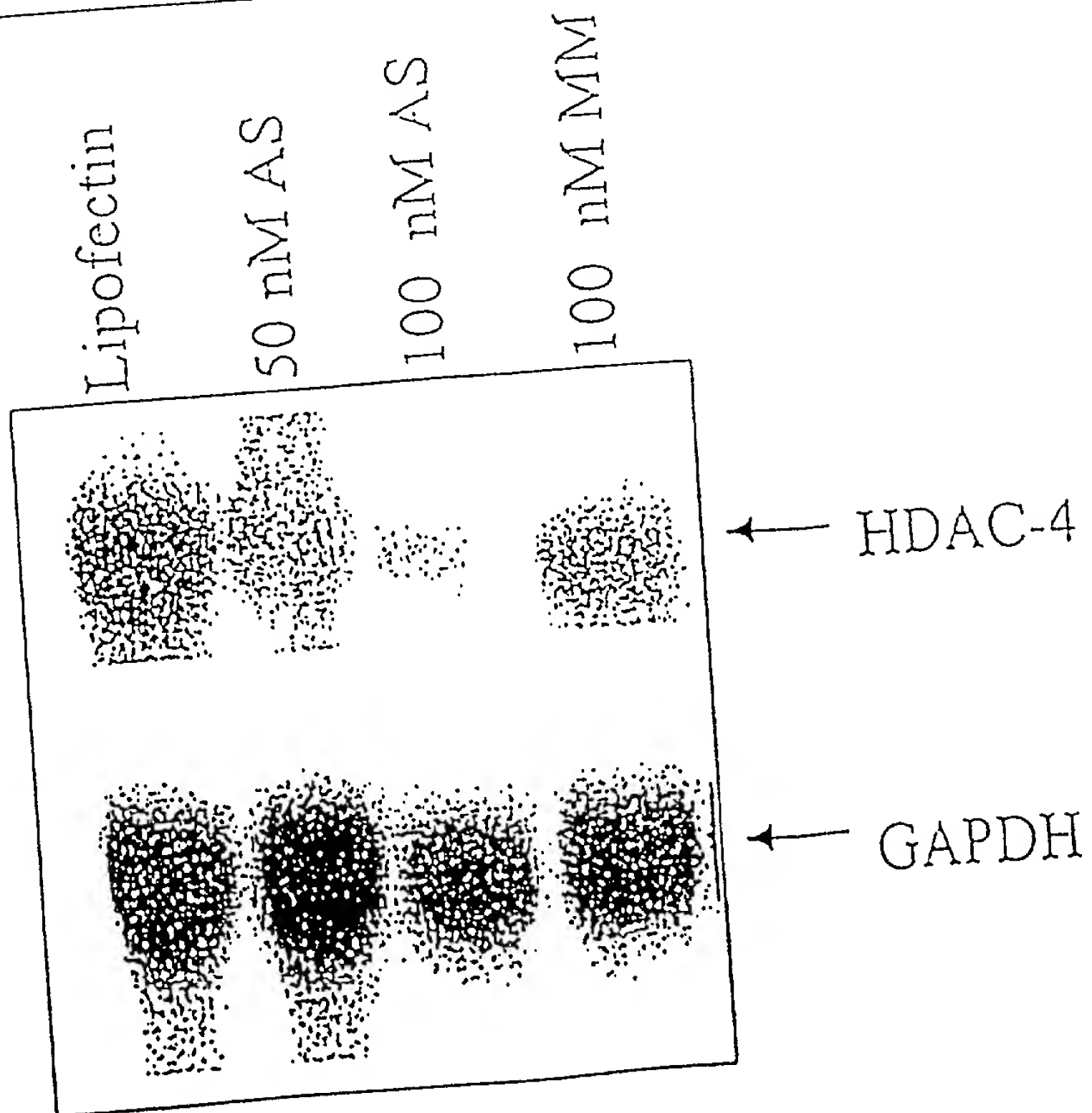


FIGURE 9 F

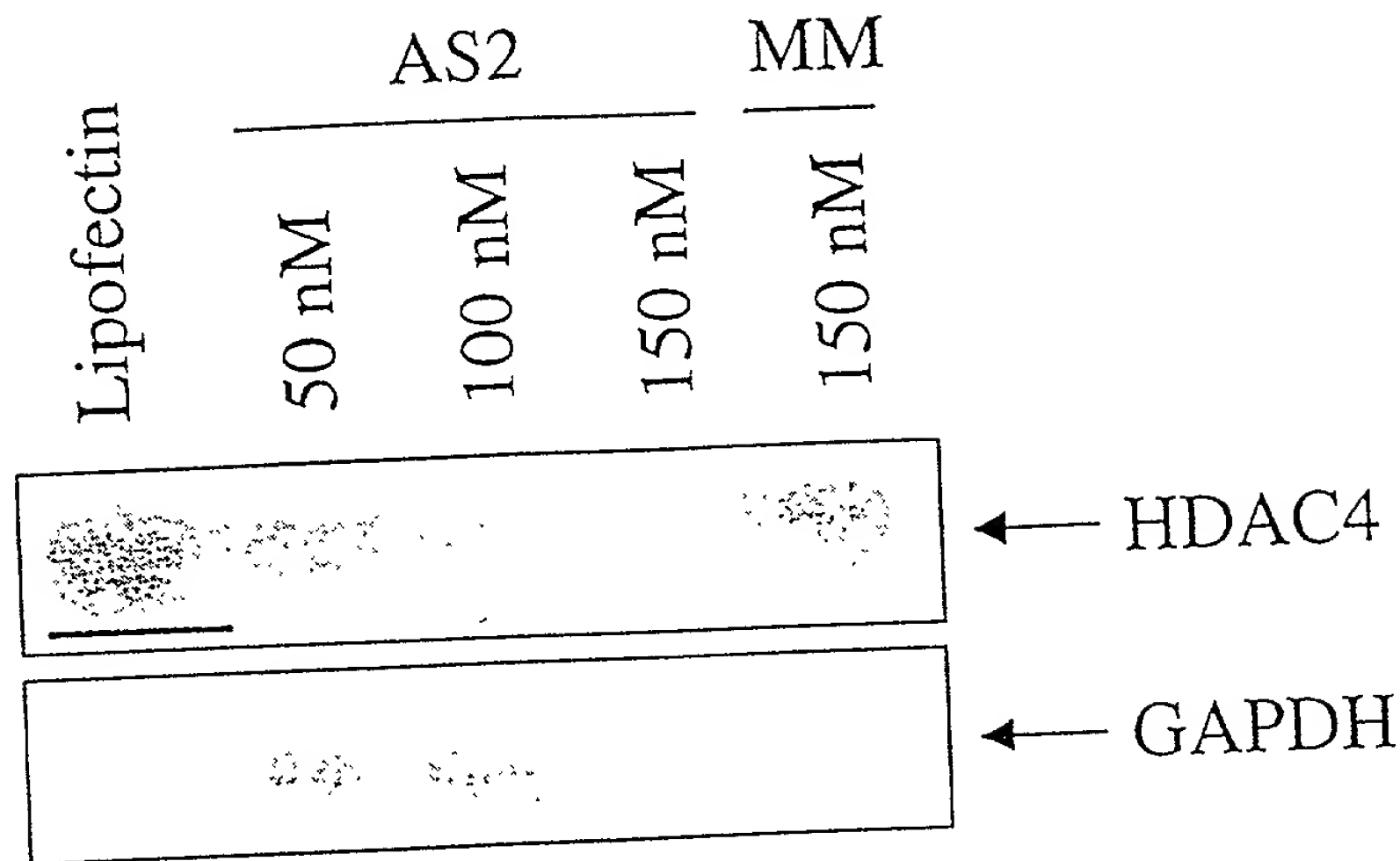


FIGURE 9 G

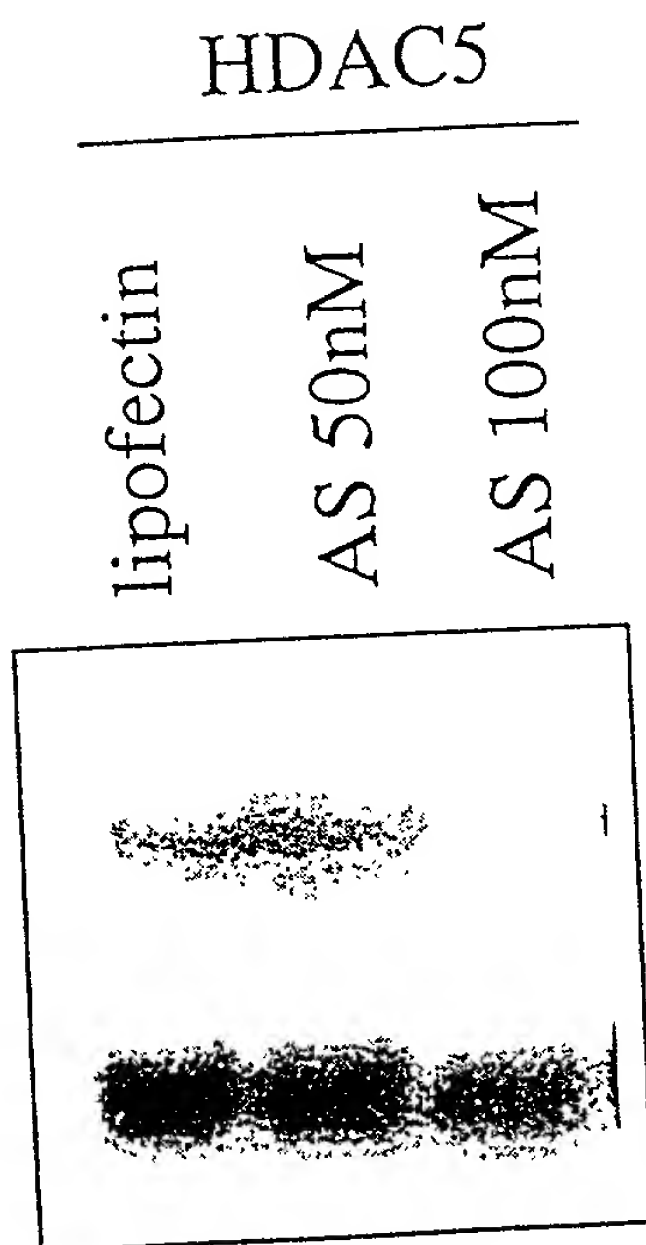


FIGURE 9 H

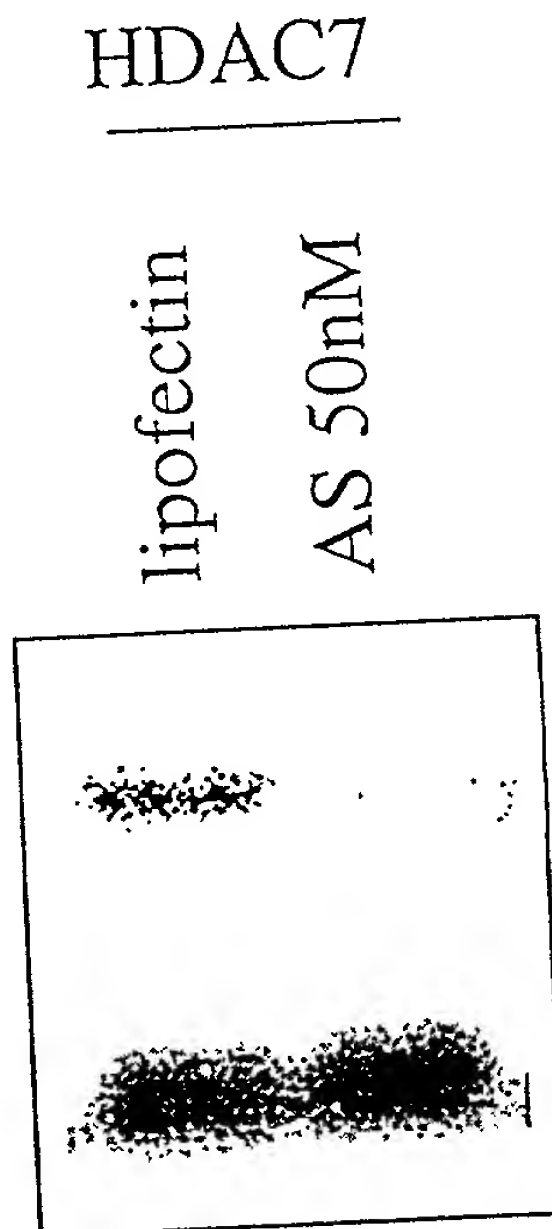


Figure 9I

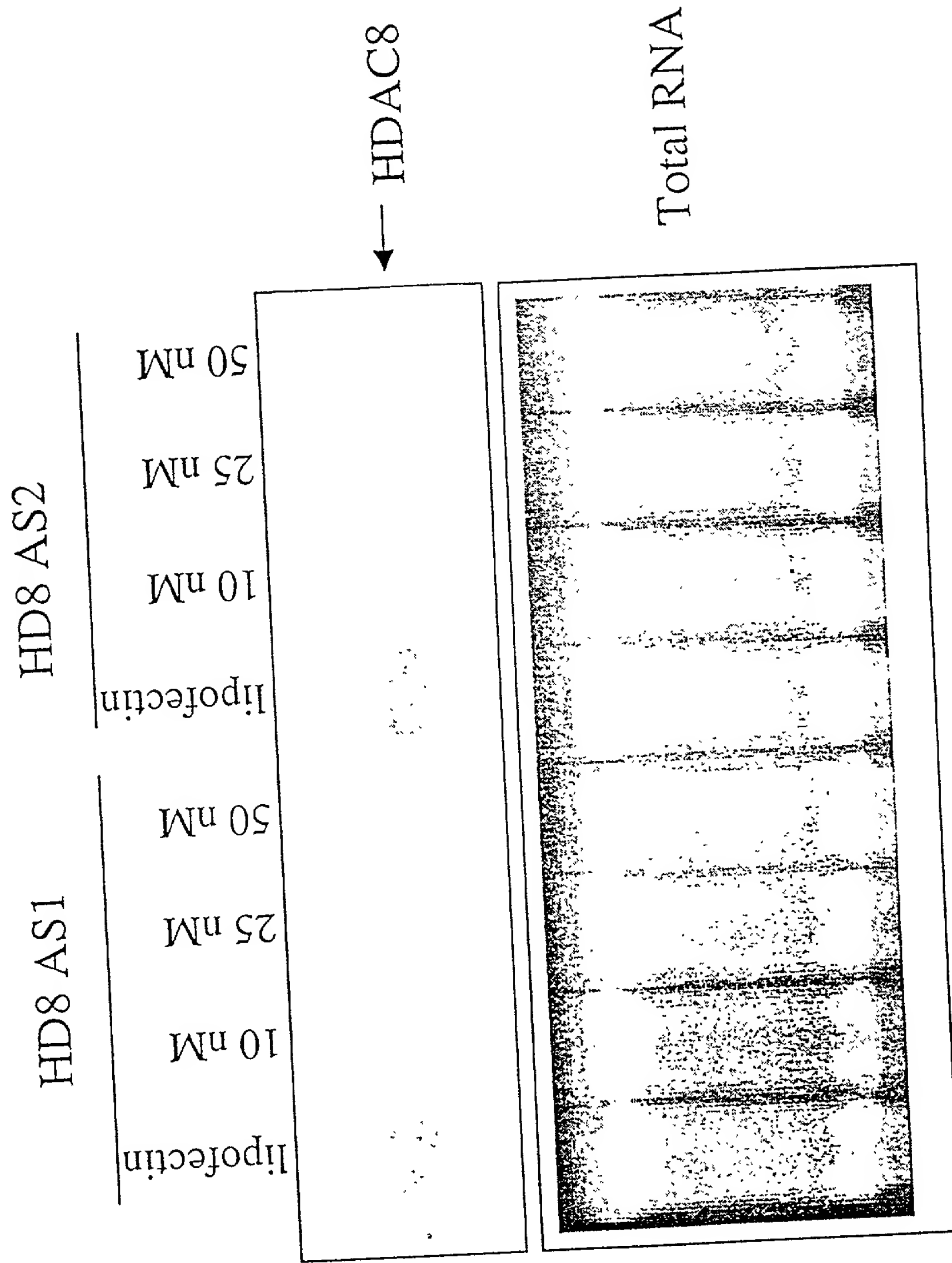
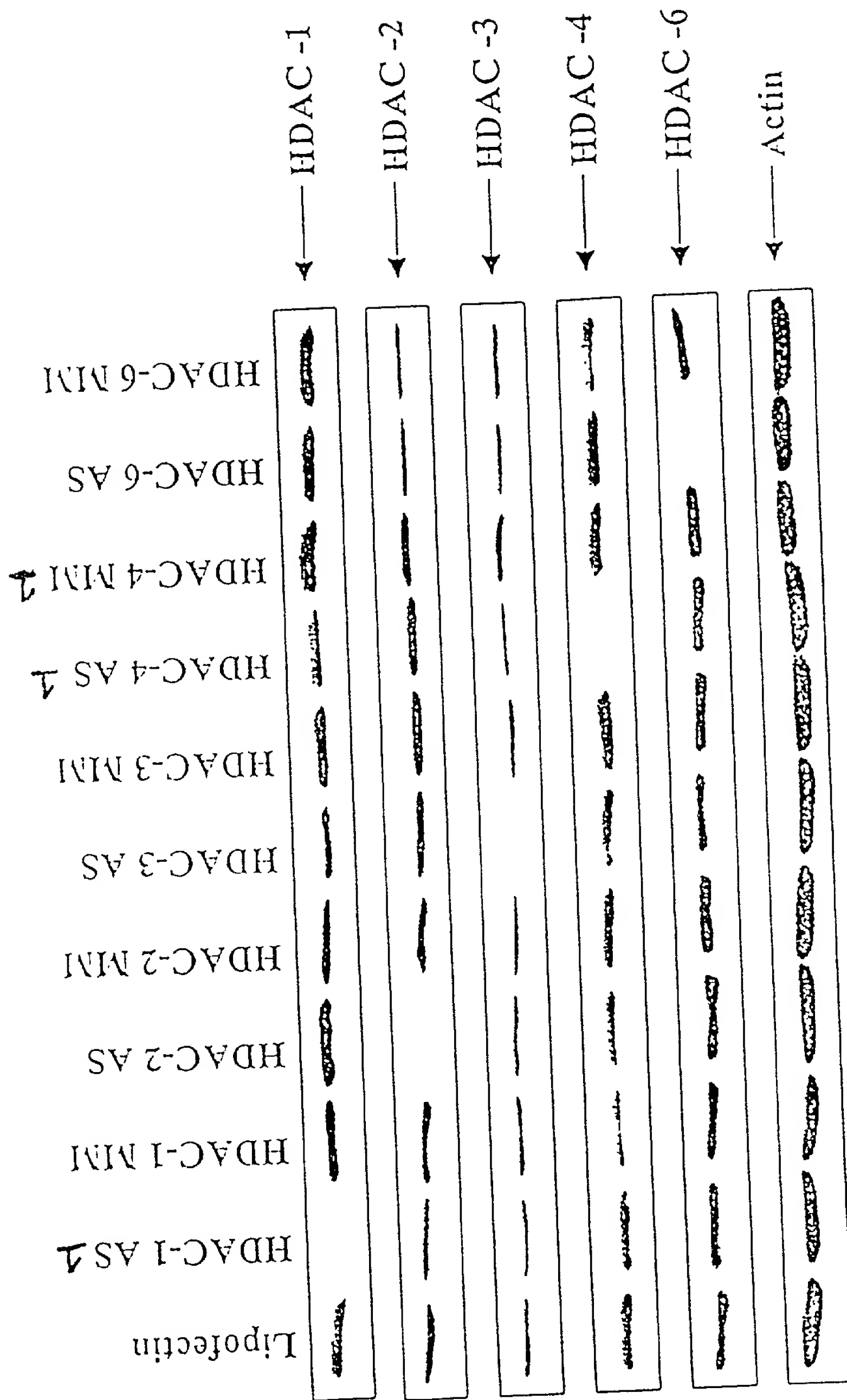


Figure 10 A



AS = Antisense
 MM = Mismatch
 NS = Non-specific control
 3 day treatment
 Oligonucleotide conc. = 50nM

FIGURE 10 B

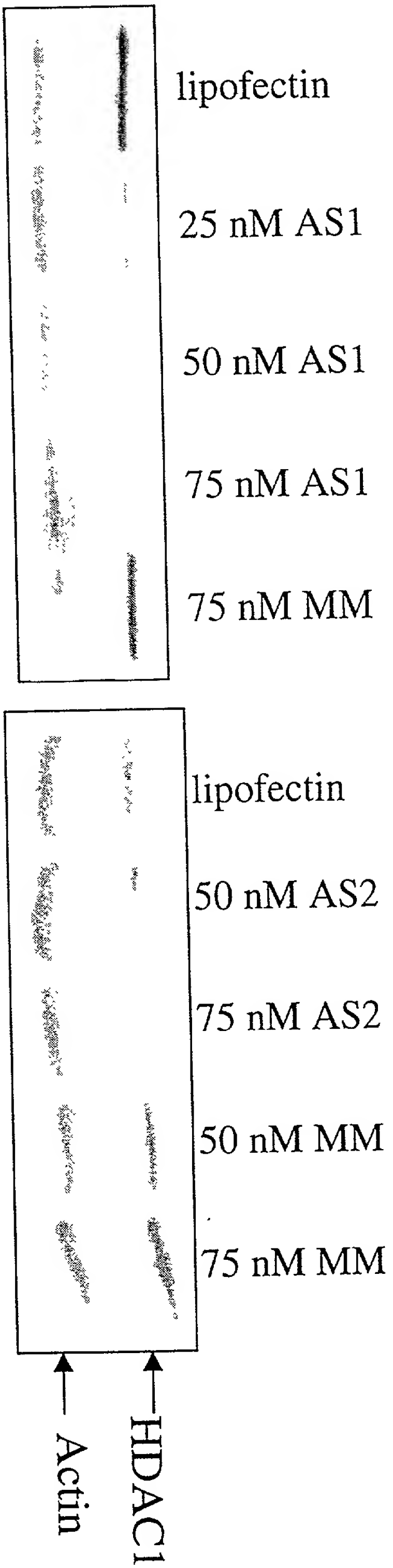


Figure 11

Figure 11

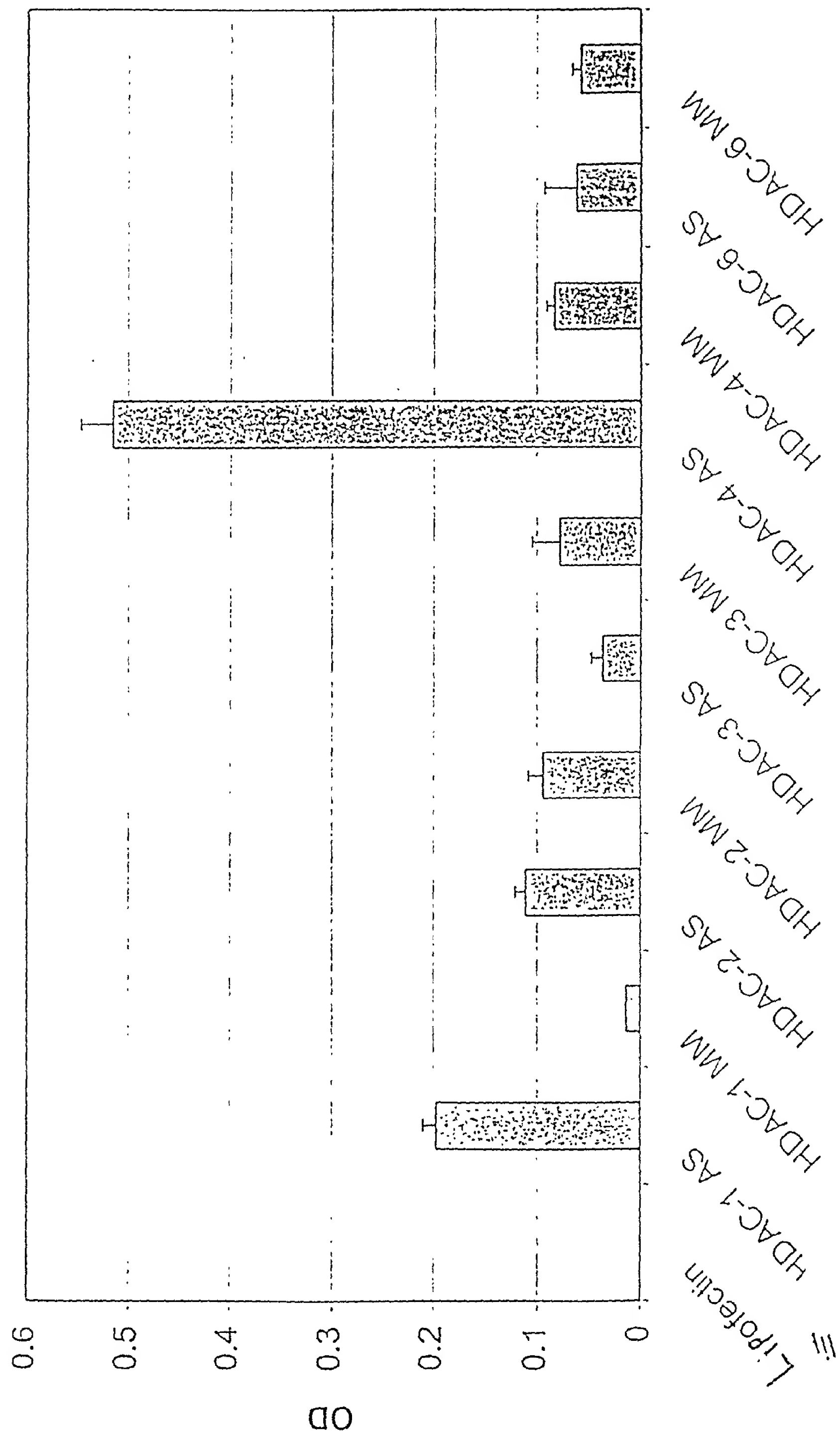


FIGURE 12A

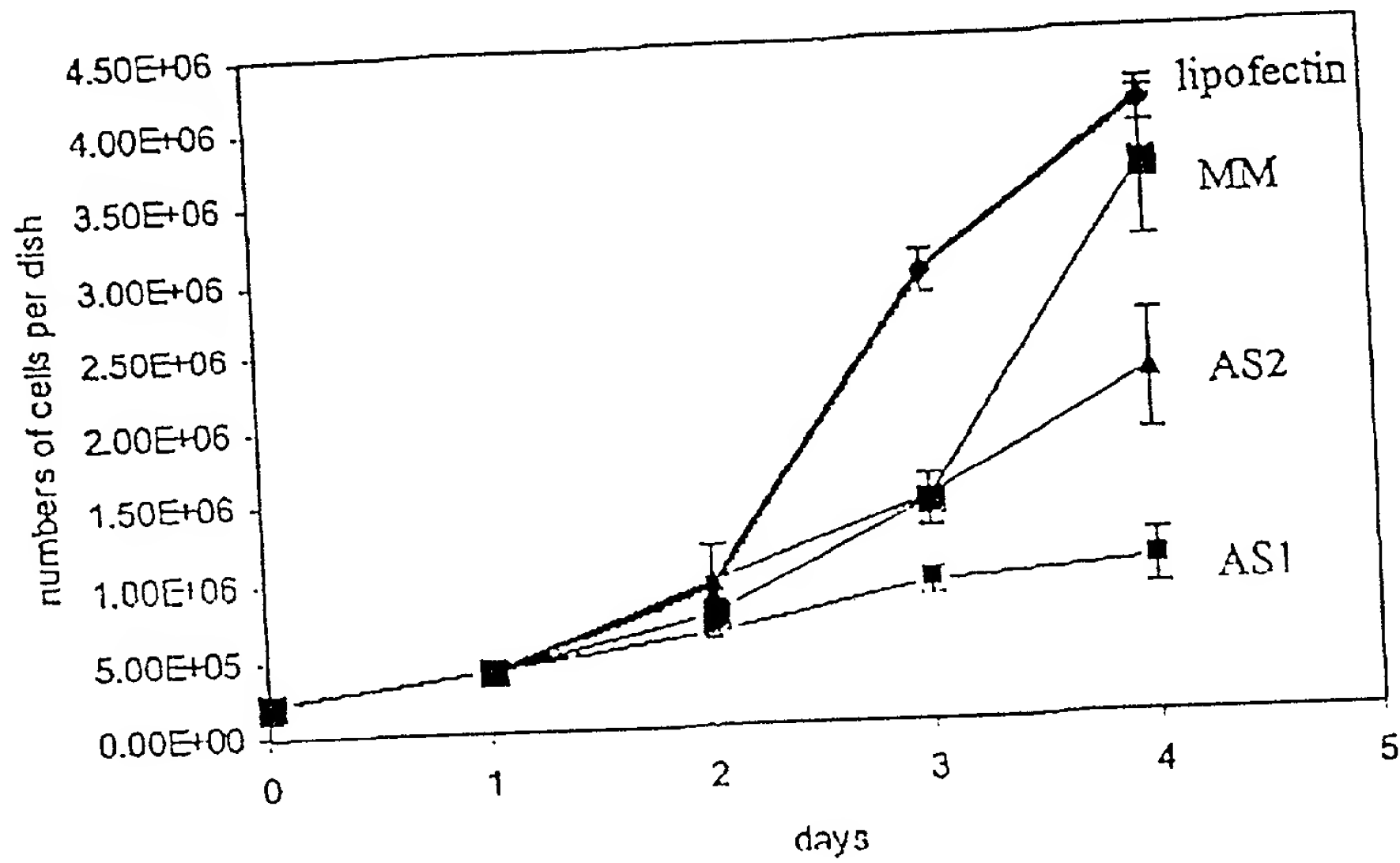


FIGURE 12B

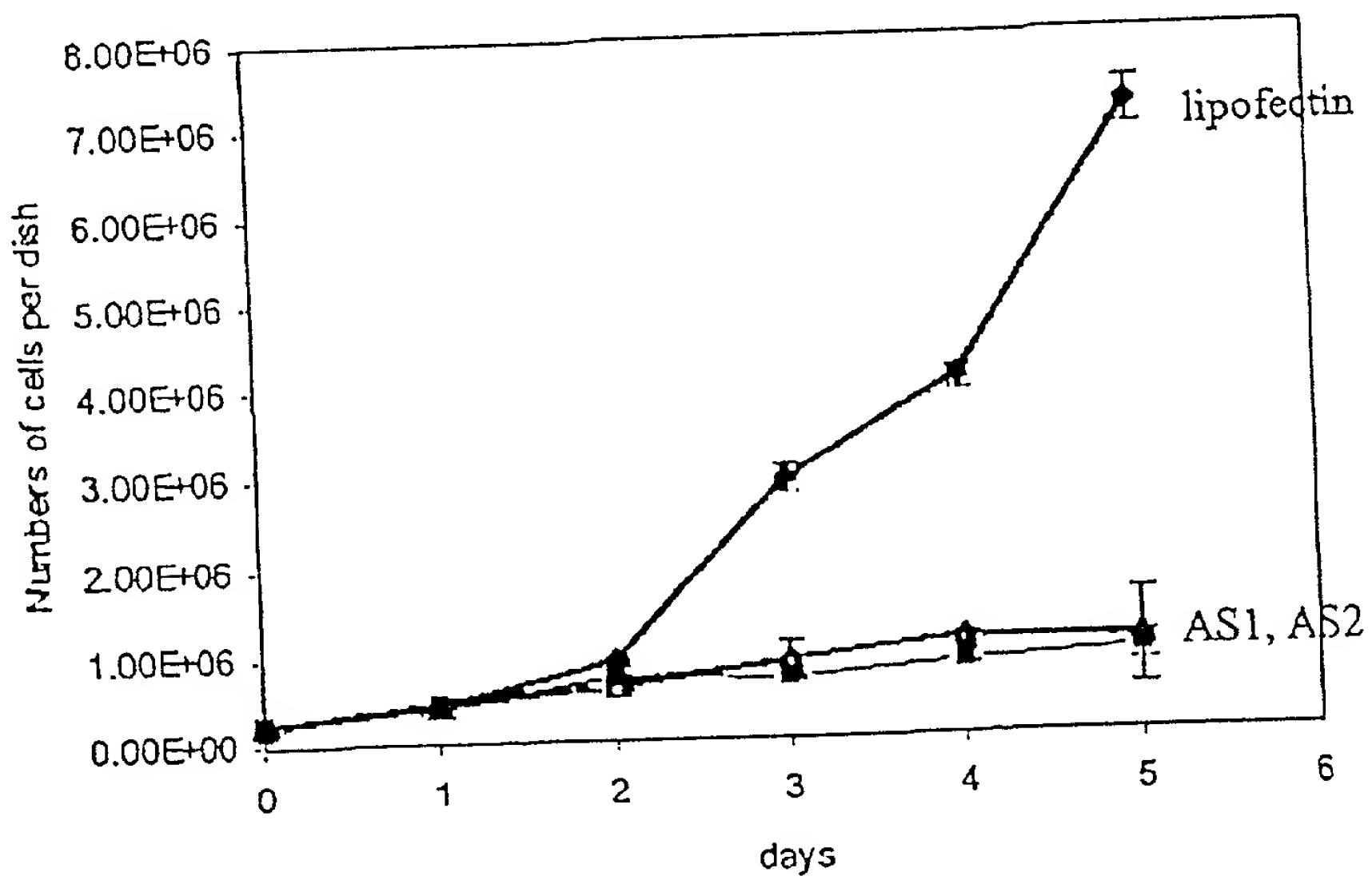
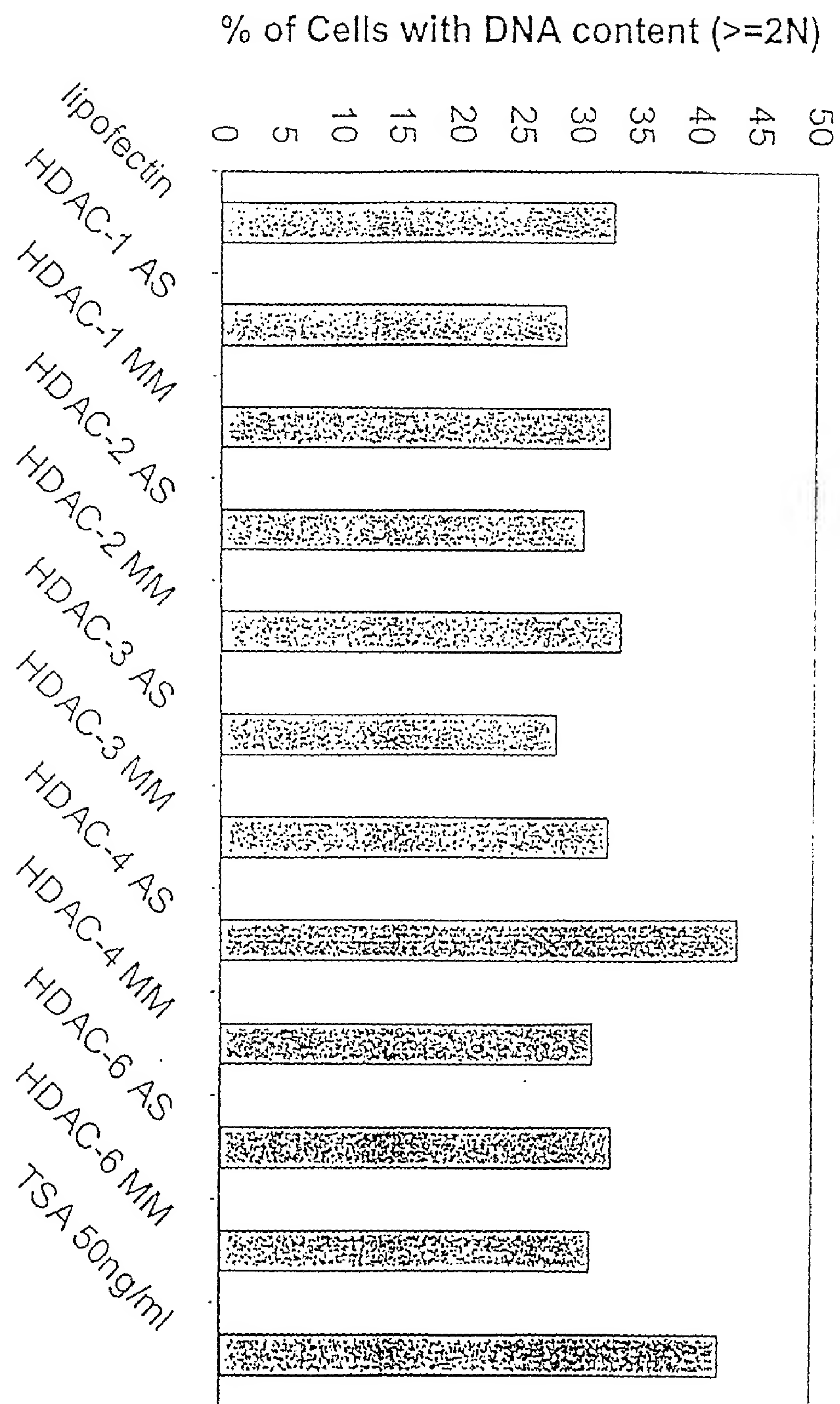


FIGURE 13



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FIGURE 14

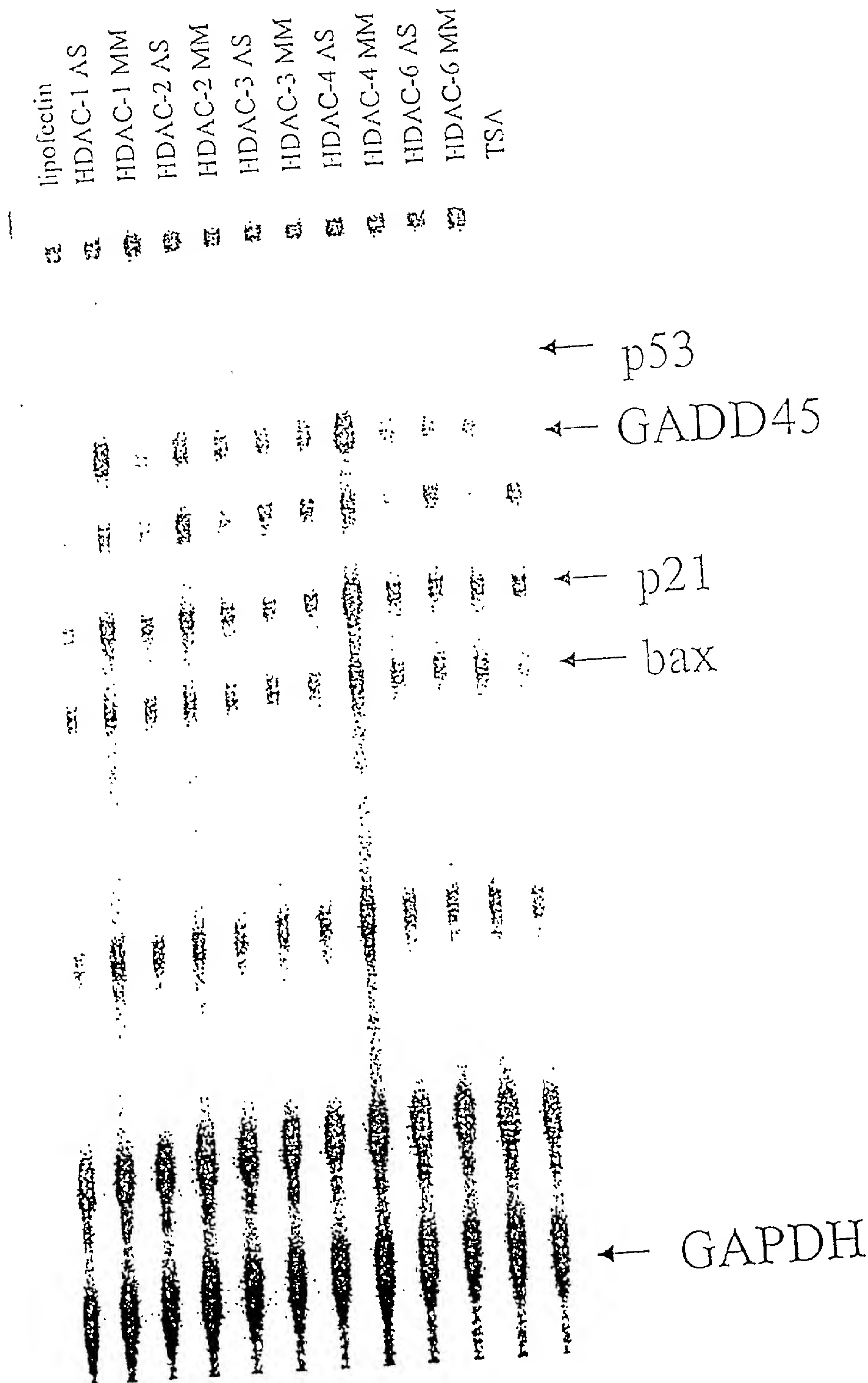


FIGURE 15

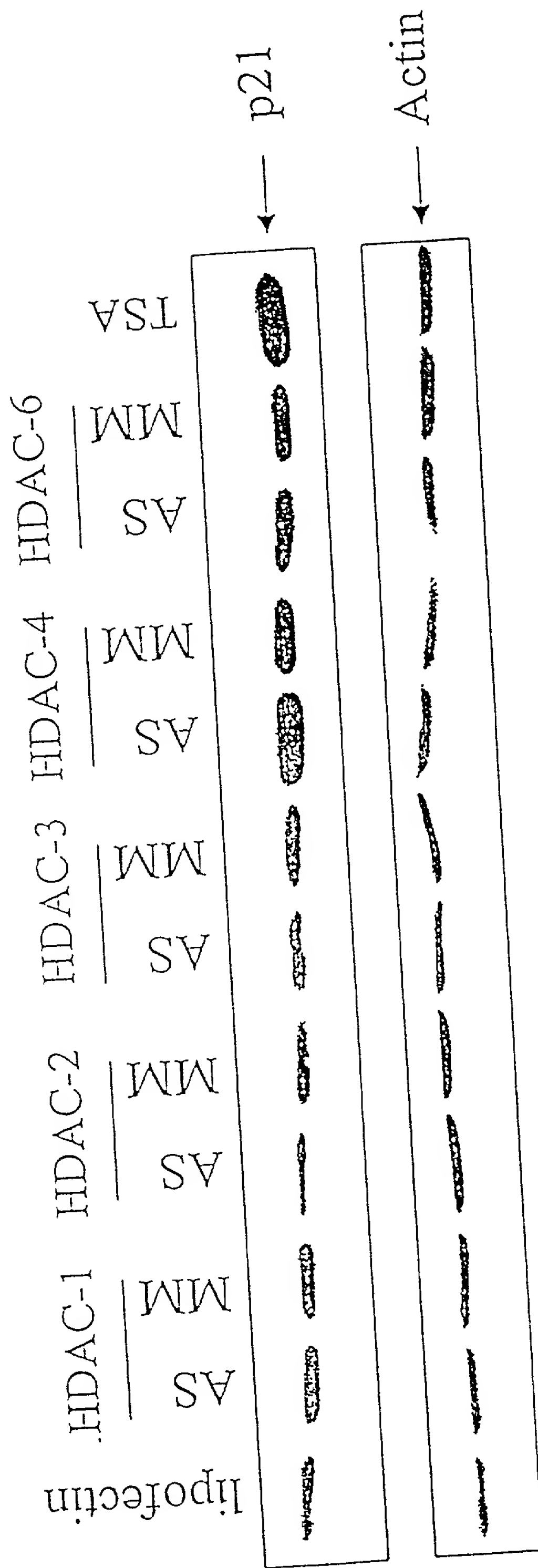


FIGURE 16

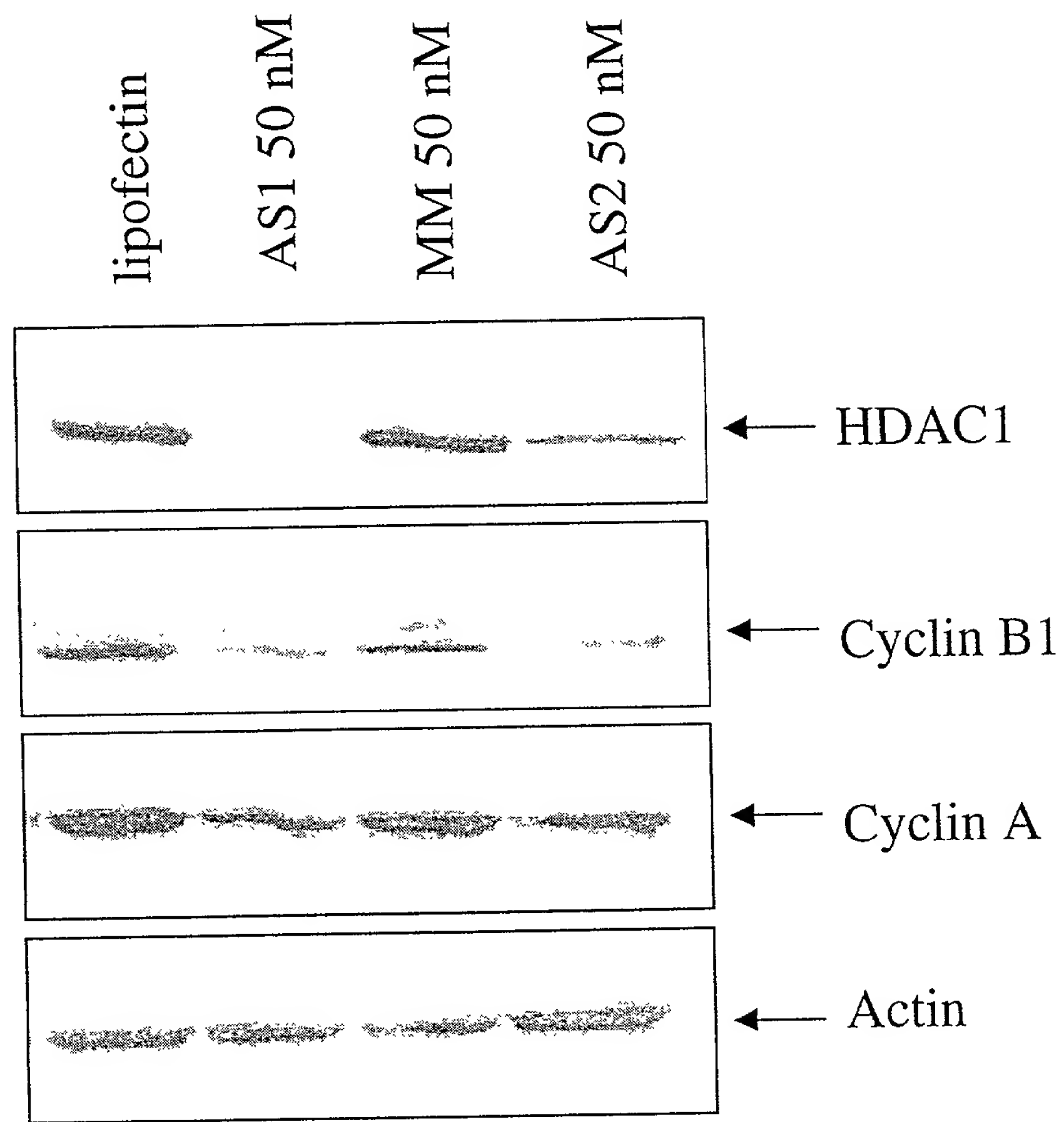


Figure 17

